#### **APPENDIX G**

# **Conditions of Certification**

#### **TABLE G-1 CONDITIONS OF CERTIFICATION**

Co	ndition of Certification	Verification	Responsible Agency
All	RQUALITY		
ST	AFF CONDITIONS OF CERTIFICATION		
SC to on ap ad	<b>In-SC1</b> Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site CMM who shall be responsible for directing and documenting compliance with Conditions of Certification AQ-SC3, AQ-4 and AQ-SC5 for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities one or more AQCMM Delegates. The AQCMM and AQCMM Delegates shall have full access to all areas of construction the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by olicable construction mitigation conditions. The AQCMM and AQCMM Delegates may have other responsibilities in dition to those described in this condition. The AQCMM shall not be terminated without written consent of the Compliance object Manager (CPM).	At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates.	CEC/BLM
de	<b>I-SC2</b> Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide an AQCMP, for approval, which ails the steps that will be taken and the reporting requirements necessary to ensure compliance with Conditions of rtification <b>AQ-SC3</b> , <b>AQ-SC4</b> , and <b>AQ-SC5</b> .	At least 30 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The AQCMP shall include effectiveness and environmental data for the proposed soil stabilizer. The CPM will notify the project owner of any necessary modifications to the plan within 15 days from the date of receipt.	CEC/BLM
Co me du foll	<u>t-SC3</u> Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each Monthly mpliance Report that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation assures for the purposes of minimizing fugitive dust emission creation form construction activities and preventing all fugitive st plumes that would not comply with the performance standards identified in <b>AQ-SC4</b> from leaving the project site. The owing fugitive dust mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required AQ-SC2 and any deviation from the AQCMP mitigation measures shall require prior CPM notification and approval.	The AQCMM shall provide the CPM a Monthly Compliance Report to include the following to demonstrate control of fugitive dust emissions:  A. A summary of all actions taken to maintain compliance with this condition;	CEC/BLM
a.	The main access roads through the facility to the power block areas will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction in the main power block area, and delivery areas for operations materials (chemicals, replacement parts, etc.) will be paved or treated prior to taking initial deliveries.	B. Copies of any complaints filed with the District in relation to project construction; and     C. Any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this condition. Such information may be provided via	
b.	All unpaved construction roads and unpaved operation and maintenance site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than ARB approved soil stabilizers, and that shall not increase any other environmental impacts, including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading (consistent with BIO-7); and after active construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods, in order to comply with the dust mitigation objectives of Condition of Certification AQ-SC4. The frequency of watering can be reduced or eliminated during periods of precipitation.	electronic format or disk at the project owner's discretion	

Co	ndition of Certification	Verification	Responsible Agency
AIR	QUALITY (cont.)		
C.	No vehicle shall exceed 10 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.		
d.	Visible speed limit signs shall be posted at the construction site entrances.		
e.	All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.		
f.	Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.		
g.	All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.		
h.	All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM.		
i.	Construction areas adjacent to any paved roadway below the grade of the surrounding construction area or otherwise directly impacted by sediment from site drainage shall be provided with sandbags or other equivalently effective measures to prevent run-off to roadways, or other similar run-off control measures as specified in the Storm Water Pollution Prevention Plan (SWPPP), only when such SWPPP measures are necessary so that this condition does not conflict with the requirements of the SWPPP.		
j.	All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.		
k.	At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads en route from the construction site or construction staging areas shall be swept as needed (less during periods of precipitation) on days when construction activity occurs or on any other day when dirt or runoff resulting from the construction site activities is visible on the public paved roadways.		
I.	All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or shall be treated with appropriate dust suppressant compounds.		
m.	All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.		
n.	Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.		
for and cen	<b>-SC4</b> Dust Plume Response Requirement: The AQCMM or an AQCMM Delegate shall monitor all construction activities visible dust plumes. Observations of visible dust plumes that have the potential to be transported (A) off the project site within 400 feet upwind of any regularly occupied structures not owned by the project owner or (B) 200 feet beyond the terline of the construction of linear facilities indicate that existing mitigation measures are not resulting in effective gation. The AQCMP shall include a section detailing how the additional mitigation measures will be accomplished within	The AQCMM shall provide the CPM a Monthly Compliance Report to include:  A. A summary of all actions taken to maintain compliance with this condition;	CEC/BLM

Conditi	on of Certification	Verification	Responsibl Agency
AIR QU	ALITY (cont.)		
	limits specified. The AQCMM or Delegate shall implement the following procedures for additional mitigation measure vent that such visible dust plumes are observed:	B. Copies of any complaints filed with the District in relation to project construction; and	
	The AQCMM or Delegate shall direct more intensive application of the existing mitigation methods within 15 minutes making such a determination.	C. Any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this	
	The AQCMM or Delegate shall direct implementation of additional methods of dust suppression if Step 1, specified pove, fails to result in adequate mitigation within 30 minutes of the original determination.	condition. Such information may be provided via electronic format or disk at the project owner's discretion	
above, t AQCMN dust plu from the	The AQCMM or Delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2, specified ails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the for Delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual mes will not result upon restarting the shutdown source. The owner/operator may appeal to the CPM any directive AQCMM or Delegate to shut down an activity, if the shutdown shall go into effect within one hour of the original nation, unless overruled by the CPM before that time.		
constructions diesel c ncluded	Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the Monthly Compliance Report, a stion mitigation report that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling construction-related emissions. The following off-road diesel construction equipment mitigation measures shall be I in the Air Quality Mitigation Plan (AQCMP) required by AQ-SC2, and any deviation from the AQCMP mitigation es shall require prior and CPM notification and approval.	The AQCMM shall include in the Monthly Compliance Report the following to demonstrate control of diesel construction-related emissions:  A. A summary of all actions taken to maintain compliance with this condition	CEC/BLM
	diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site ICMM showing that the engine meets the conditions set forth herein.	B. A list of all heavy equipment used on site during that month, including the owner of that equipment	
3 (	construction diesel engines with a rating of 50 hp or higher and lower than 750 hp shall meet, at a minimum, the Tier california Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of	and a letter from each owner indicating that equipment has been properly maintained; and	
on 75 Iar eq (D su	Regulations, Title 13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. Engines larger than 750 hp shall meet Tier 2 engine standards. In the event that a Tier 3 engine is not available for any off-road equipment larger than 50 hp and smaller than 750 hp, that equipment shall be equipped with a Tier 2 engine, or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 2 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" for the following, as well as other, reasons.	C. Any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this condition, including any District permits necessary for temporary stationary diesel engines, or ARB certification for state registered portable equipment. Such information may be provided via electronic format or disk at the project owner's discretion.	
1.	There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or		
2.	The construction equipment is intended to be on site for 10 days or less.		
3.	The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not practical.		

Cor	dition of Certification	Verification	Responsible Agency
AIR	QUALITY (cont.)		
C.	The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and that a replacement for the equipment item in question meeting the controls required in item "b" occurs within 10 days of termination of the use, if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, if one of the following conditions exists:		
	<ol> <li>The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.</li> </ol>		
	2. The retrofit control device is causing or is reasonably expected to cause engine damage.		
	3. The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.		
	<ol> <li>Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.</li> </ol>		
d.	All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.		
e.	All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.		
f.	Construction equipment will employ electric motors when feasible.		
faci	SC6 The project owner, when obtaining dedicated on-road or off-road vehicles for mirror washing activities and other ity maintenance activities, shall only obtain vehicles that meet California on-road vehicle emission standards or ropriate U.S.EPA/California off-road engine emission standards for the latest model year available when obtained.	At least 30 days prior to the start commercial operation, the project owner shall submit to the CPM a copy of the plan that identifies the size and type of the on-site vehicle and equipment fleet and the vehicle and equipment purchase orders and contracts and/or purchase schedule. The plan shall be updated every other year and submitted in the Annual Compliance Report.	CEC/BLM
mea ope	SC7 The project owner shall provide a site Operations Dust Control Plan, including all applicable fugitive dust control sures identified in the verification of AQ-SC3 that would be applicable to minimizing fugitive dust emission creation from ration and maintenance activities and preventing all fugitive dust plumes that would not comply with the performance dards identified in AQ-SC4 from leaving the project site that:	At least 30 days prior to start of commercial operation, the project owner shall submit to the CPM for review and approval a copy of the site Operations Dust Control Plan that identifies the dust and erosion control	CEC/BLM
a.	describes the active operations and wind erosion control techniques such as windbreaks and chemical dust suppressants, including their ongoing maintenance procedures, that shall be used on areas that could be disturbed by vehicles or wind anywhere within the project boundaries; and	procedures, including effectiveness and environmental data for the proposed soil stabilizer, that will be used during operation of the project and that identifies all locations of the speed limit signs. Within 60 days after	
b.	identifies the location of signs throughout the facility that will limit traveling on unpaved portion of roadways to solar equipment maintenance vehicles only. In addition, vehicle speed shall be limited to no more than 10 miles per hour on these unpaved roadways, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.	commercial operation, the project owner shall provide to the CPM a report identifying the locations of all speed limit signs, and a copy of the project employee and contractor training manual that clearly identifies	

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
The site operations fugitive dust control plan shall include the use of durable non-toxic soil stabilizers on all regularly used unpaved roads and disturbed off-road areas, or alternative methods for stabilizing disturbed off-road areas, within the project boundaries, and shall include the inspection and maintenance procedures that will be undertaken to ensure that the unpaved roads remain stabilized. The soil stabilizer used shall be a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than ARB approved soil stabilizers, and that shall not increase any other environmental impacts, including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control.	that project employees and contractors are required to comply with the dust and erosion control procedures and on-site speed limits.	
The performance and application of the fugitive dust controls shall also be measured against and meet the performance requirements of condition <b>AQ-SC4</b> . The measures and performance requirements of <b>AQ-SC4</b> shall also be included in the operations dust control plan.		
<b>AQ-SC8</b> The project owner shall provide the CPM copies of all District issued Authority-to-Construct (ATC) and Permit-to-Operate (PTO) documents for the facility.	The project owner shall submit any ATC, PTO, and proposed federal air permit modifications to the CPM	CEC/BLM
The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project federal air permit. The project owner shall submit to the CPM any modification to any federal air permit proposed by the District or U.S. Environmental Protection Agency (U.S. EPA), and any revised federal air permit issued by the District or U.S. EPA, for the project.	within 5 working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified ATC/PTO documents and all federal air permits to the CPM within 15 days of receipt.	
DISTRICT CONDITIONS		
DISTRICT FINAL DETERMINATION OF COMPLIANCE CONDITIONS (MDAQMD 2010b)		
Application No. 00010788 and 00010789 (Two - 30 MMBtu/hr Natural Gas Fired Auxiliary Boiler)		
EQUIPMENT DESCRIPTION:		
Two, 30 MMBtu/hr natural gas boilers with low-NOx burner systems.		
AQ-1 Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-2 This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Con	dition of Certification	Verification	Responsible Agency
AIR	AIR QUALITY (cont.)		
AQ-:	3 Emissions from this equipment shall not exceed the following hourly emission limits at any firing rate, verified by use and annual compliance tests:	As part of the Annual Compliance Report, the project owner shall include information demonstrating	CEC/BLM
a.	NOx as NO <sub>2</sub> :	compliance with boiler operating emission rates.	
	1. 0.330 lb/hr operating at 100% load (based on 9.0 ppmvd corrected to 3% O <sub>2</sub> and averaged over one hour)		
b.	CO:		
	1. 0.563 lb/hr operating at 100% load (based on 50 ppmvd corrected to 3% O <sub>2</sub> and averaged over one hour)		
C.	VOC as CH <sub>4</sub> :		
	1. 0.088 lb/hr operating at 100% load		
d.	SOx as SO₂:		
	1. 0.008 lb/hr operating at 100% load		
e.	PM10:		
	1. 0.150 lb/hr operating at 100% load		
	The project owner shall maintain an operations log for this equipment on-site and current for a minimum of five (5) s, and said log shall be provided to District personnel on request. The operations log shall include the following mation at a minimum:	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy	CEC/BLM
a.	Total operation time (hour/day, hours/month and cumulative hours-/rolling twelve months);	Commission.	
b.	Fuel use (daily, monthly and cumulative hours/rolling twelve months);		
	Maximum hourly, maximum daily, total quarterly, and total calendar year emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); and,		
	Any permanent changes made to the equipment that would affect air pollutant emissions, and indicate when changes were made.		
AQ-	This equipment shall not be operated for more than 1,000 hours per rolling twelve month period and more than 14 rs per calendar day.	The project owner shall submit to the CPM the boiler hours of use records demonstrating compliance with this condition as part of the Annual Operation Report.	CEC/BLM
a.	The project owner shall perform initial compliance tests on this equipment in accordance with the MDAQMD apliance Test Procedural Manual. The test report shall be submitted to the District within 180 days of initial start up:  NOx as NO <sub>2</sub> in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).  VOC as CH <sub>4</sub> in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).	The project owner shall notify the District and the CPM within fifteen (15) working days before the execution of the compliance test required in this condition. The test results shall be submitted to the District and to the CPM within 180 days of initial start up.	CEC/BLM

Co	ndition of Certification	Verification	Responsible Agency
All	QUALITY (cont.)		
C.	SOx as SO <sub>2</sub> in ppmvd at 3% oxygen and lb/hr.		
d.	CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).		
e.	PM10 in mg/m³ at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).		
f.	Flue gas flow rate in dscf per minute.		
g.	Opacity (measured per USEPA `reference Method 9).		
	Opacity (measured per USEPA `reference Method 9).  The project owner shall perform annual compliance tests on this equipment in accordance with the MDAQMD mpliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the biration date of this permit. The following compliance tests are required:  NOx as NO <sub>2</sub> in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).  The project owner shall notify the District and the CPM within fifteen (15) working days before the execution of the compliance test required in this condition. The test results shall be submitted to the District and to the CPM within the timeframe required by this condition.		CEC/BLM
a.	NOx as NO <sub>2</sub> in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).	within fifteen (15) working days before the execution the compliance test required in this condition. The test results shall be submitted to the District and to the	
b.	VOC as CH <sub>4</sub> in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).	and the same and t	
C.	SOx as SO <sub>2</sub> in ppmvd at 3% oxygen and lb/hr.		
d.	CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).		
e.	PM10 in mg/m³ at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).		
f.	Flue gas flow rate in dscf per minute.		
g.	Opacity (measured per USEPA reference Method 9).		

#### Application No. 00010842 and 00010843 (Two - HTF Ullage Expansion Tank)

#### **EQUIPMENT DESCRIPTION:**

Two HTF ullage/expansion tanks.

AQ-8 Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-9 This system shall store only HTF, specifically the condensable fraction of the vapors vented from the ullage system.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
<ul> <li>AQ-10 This system shall be operated at all times with the carbon adsorption system as follows:</li> <li>a. The carbon adsorption system shall provide 98% control efficiency of VOC emissions vented from the HTF ullage system.</li> </ul>	The project owner shall submit information demonstrating compliance with the substantive and recordkeeping provisions of this condition in the	CEC/BLM

Со	ndition of Certification	Verification	Responsible Agency
AIF	R QUALITY (cont.)		
b.	The project owner shall prepare and submit a monitoring and change-out plan for the carbon adsorptions system which ensures that the system is operating at optimal control efficiency at all times for District approval prior to start up.	Annual Compliance Report.	
C.	This equipment shall be properly maintained and kept in good operating condition at all times.		
d.	This equipment must be in use and operating properly at all times the HTF ullage system is venting.		
e.	Total emissions of VOC to the atmosphere shall not exceed 1.5 lbs/day and 540 lbs/year calculated based on the most recent monitoring results.		
f.	Total emissions of benzene to the atmosphere shall not exceed 0.6 lbs/day and 220 lbs/year calculated based on the most recent monitoring results.		
g.	During operation, the project owner shall monitor VOC measured at outlet from the carbon beds. Sampling is to be performed on a weekly basis. Samples shall be analyzed pursuant to U.S.EPA Test Method 25 – Gaseous Nonmethane Organic Emissions. Initial test shall be submitted to the District within 180 days after startup.		
h.	FID shall be considered invalid if not calibrated on the day of required use.		
i.	The project owner shall maintain current and on-site for the duration of the project a log of the weekly test results, which shall be provided to District personnel upon request, with date and time the monitoring was conducted.		
j.	Prior to January 31 of each new year, the project owner of this unit shall submit to the District a summary report of all VOC emissions (as hexane).		
<b>AQ</b> pla	Vent release shall be monitored in accordance with a District approved Inspection, Monitoring and Maintenance n.	The inspection, monitoring, and maintenance plan for the vent release shall be submitted to the CPM for review at least 30 days before taking delivery of the HTF.	CEC/BLM
НТ	-12 The project owner shall establish an inspection and maintenance program to determine repair, and log leaks in F piping network and expansion tanks. Inspection and maintenance program and documentation shall be available to trict staff upon request.	The inspection and maintenance plan shall be submitted to the CPM for review and approval at least 30 days before taking delivery of the HTF. As part of	CEC/BLM
a.	All pumps, compressors and pressure relief devices (pressure relief valves or rupture disks) shall be electronically, audio, or visually inspected once every operating day.	the Annual Compliance Report, the project owner shall provide the quantity of used HTF fluid removed from the system and the amount of new HTF fluid added to	
b.	All accessible valves, fittings, pressure relief devices (PRDs), hatches, pumps, compressors, etc. shall be inspected quarterly using a leak detection device such as a Foxboro OVA 108 calibrated for methane.	the system each year. The project owner shall make the site available for inspection of HTF piping	
C.	Inspection frequency for accessible components, except pumps, compressors and pressure relief valves, may be changed from quarterly to annual when two percent or less of the components within a component type are found to leak during an inspection for five consecutive quarters.	Inspection and Maintenance Program records and HTF system equipment by representatives of the District, ARB, and the Energy Commission.	
d.	Inspection frequency for accessible components, except pumps, compressors and pressure relief valves, shall be increased to quarterly when more than two percent of the components within a component type are found to leak during any inspection or report.		

Co	ndition of Certification	Verification	Responsible Agency
AIR	QUALITY (cont.)		
e.	If any evidence of a potential leak is found the indication of the potential leak shall be eliminated within 7 calendar days of detection.		
f.	VOC leaks greater than 10,000-ppmv shall be repaired within 24-hours of detection.		
g.	After a repair, the component shall be re-inspected for leaks as soon as practicable, but no later than 30 days after the date on which the component is repaired and placed in service.		
h.	The project owner shall maintain a log of all VOC leaks exceeding 10,000-ppmv, including location, component type, date of leak detection, emission level (ppmv), method of leak detection, date of and repair, date and emission level of reinspection after leak is repaired.		
i.	The project owner shall maintain records of the total number of components inspected, and the total number and percentage of leaking components found, by component types made.		
j.	The project owner shall maintain record of the amount of HTF replaced on a monthly basis for a period of 5 years.		
the noti ma	duct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to compliance/certification tests the project owner shall provide a written test plan for District review and approval. Written ce of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer y be present. A written report with the results of such compliance/certification tests shall be submitted to the District within y-five (45) days after testing.	protocol to the District for approval and CPM for review at least no later than sixty (60) days after start-up and submit a test plan to the District for approval and CPM for review at least thirty (30) days prior to the compliance tests. The project owner shall notify the District and the CPM within ten (10) working days before the execution of the compliance tests required in AQ-14 and AQ-15, and the test results shall be submitted to the District and to the CPM within forty-five (45) days after the tests are conducted.	
MD	The project owner shall perform the following initial compliance tests on this equipment in accordance with the AQMD Compliance Test Procedural Manual. The test report shall be submitted to the District within 180 days of initial t up. The following compliance tests are required:	The project owner shall submit the test results to the District and to the CPM within 180 days after initial start up.	CEC/BLM
a.	VOC as CH₄ in ppmvd and lb/hr (measured per USEPA Reference Methods 25A and 18 or equivalent).		
b.	Benzene in ppmvd and lb/hr (measured per CARB method 410 or equivalent).		
	-15 The project owner shall perform the following annual compliance tests on this equipment in accordance with the AQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior ne expiration date of this permit. The following compliance tests are required:	As part of the Annual Compliance Report, the project owner shall include the test results demonstrating compliance with this condition and the project owner	CEC/BLM
to t		shall make the site available for inspection of records	I
to t	VOC as CH₄ in ppmvd and lb/hr (measured per USEPA Reference Methods 25A and 18 or equivalent).	by representatives of the District, ARB, and the Energy	

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
Additionally, records of all compliance tests shall be maintained on site for a period of five (5) years and presented to District personnel upon requ		
<ul> <li>AQ-16 Emissions from this equipment may not exceed the following emission limits, based on a calendar day summary:</li> <li>a. VOC as CH<sub>4</sub> – 1.5 lb/day, verified by compliance test.</li> <li>b. Benzene – 0.6 lb/day, verified by compliance test.</li> </ul>	As part of the Annual Compliance Report, the project owner shall include the test results demonstrating compliance with this condition and the project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
<b>AQ-17</b> If current non-criteria substances become regulated as toxic or hazardous substances and are used in this equipment, the project owner shall submit to the District a plan demonstrating how compliance will be achieved and maintained with such regulations.	The project owner shall submit a compliance plan of the toxic or hazardous substances for District approval and CPM review if current non-criteria substances in the HTF become regulated as toxic or hazardous substances.	CEC/BLM
Application No. 00010787 and 00010841 (Two Cooling Towers)		1
EQUIPMENT DESCRIPTION:		
Two 7-cell cooling towers with drift eliminator rate of 0.0005% and water circulation rate of 94,623 gpm.		
AQ-18 Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-19 This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-20 The drift rate shall not exceed 0.0005 percent with a maximum circulation rate of 94,623 gallons per minute. The maximum hourly PM10 emission rate shall not exceed 2.36 pounds per hour, as calculated per the written District-approved protocol.	The manufacturer guarantee data for the drift eliminator, showing compliance with this condition, shall be provided to the CPM and the District 30 days prior to cooling tower operation. As part of the Annual Compliance Report the project owner shall include information on operating emission rates to demonstrate compliance with this condition.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
AQ-21 The project owner shall perform weekly specific conductivity tests of the blow-down water to indirectly measure total dissolved solids (TDS). Quarterly tests of the below down water will be done to confirm the relationship between conductance and TDS.  The TDS shall not exceed 5,000 ppmv on a calendar monthly basis.	The cooling tower recirculation water TDS content test results shall be provided to representatives of the District, ARB, and the Energy Commission upon request.	CEC/BLM
AQ-22 The project owner shall conduct all required cooling tower water tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the project owner shall provide a written test and emissions calculation protocol for District review and approval.	The project owner shall provide an emissions calculation and water sample testing protocol to the District for approval and CPM for review at least 30 days prior to the first cooling tower water test.	CEC/BLM
AQ-23 This equipment shall not be operated for more than 3,200 hours per rolling twelve month period and more than 15 hours per calendar day.	The project owner shall submit to the CPM the cooling tower operating data demonstrating compliance with this condition as part of the Annual Operation Report.	CEC/BLM
AQ-24 The project owner shall maintain an operations log for this equipment on-site and current for a minimum of five (5) years, and said log shall be provided to District personnel on request. The operations log shall include the following information at a minimum:  a. Total operation time (hours per day, hours per month, and hours per rolling twelve month period); and  b. The date and result of each blow-down water test in TDS ppm, and the resulting mass emission rate.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-25 A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure is to be kept on_site and available to District personnel on request.	The project owner shall make available at request the written drift eliminator maintenance procedures for inspection by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Two, 341 HP diesel fueled emergency generator engines, each driving a generator.

manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless	The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission	CEC/BLM
---	--	---------

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
AQ-27 This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.	The project owner shall make the site available for inspection of equipment and fuel purchase records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-28 A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time. (Title 17 CCR §93115.10(e)(1)).	At least thirty (30) days prior to the installation of the engine, the project owner shall provide the District and the CPM the specification of the hour meter.	CEC/BLM
AQ-29 This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-30 The project owner shall maintain a operations log for this unit current and on-site, either at the engine location or at a on-site location, for a minimum of two (2) years, and for another year where it can be made available to the District staff within 5 working days from the District's request, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:	The project owner shall submit records required by this condition that demonstrating compliance with the sulfur content and engine use limitations of conditions AQ-27 and AQ-29 in the Annual Compliance Report, including	CEC/BLM
a. Date of each use and duration of each use (in hours);	a photograph showing the annual reading of engine hours. The project owner shall make the site available	
b. Reason for use (testing & maintenance, emergency, required emission testing);	for inspection of records by representatives of the	
c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,	District, ARB, and the Energy Commission.	
d. Fuel sulfur concentration (the project owner may use the supplier's certification of sulfur content if it is maintained as part of this log).		
AQ-31 This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-32 This engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
AQ-33 This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title 17 CCR 93115). In the event of conflict between these conditions and the ATCM, the more stringent shall govern.	Not necessary.	CEC/BLM
AQ-34 This unit is subject to the requirements of the Federal National Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60 Subpart IIII).	The project owner shall submit the engine specifications at least 30 days prior to purchasing the engines for review and approval demonstrating that the engines meet NSPS and ARB ATCM emission limit requirements at the time of engine purchase.	CEC/BLM
Application No. 00010792 and 00010793 (Two - 315 HP Emergency IC Engine)		
EQUIPMENT DESCRIPTION:		
Two, 315 HP diesel fueled emergency fire pump engines, each driving a fire suppression water pump.		
<b>AQ-35</b> This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.	The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-36 This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.	The project owner shall make the site available for inspection of equipment and fuel purchase records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
<b>AQ-37</b> A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time. (Title 17 CCR §93115.10(e)(1)).	At least thirty (30) days prior to the installation of the engine, the project owner shall provide the District and the CPM the specification of the hour timer.	CEC/BLM
AQ-38 This unit shall be limited to use for emergency power, defined as in response to a fire or due to low fire water pressure. In addition, this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit. The 50 hour limit can be exceeded when the emergency fire pump assembly is driven directly by a stationary diesel fueled CI engine operated per and in accord with the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 1998 edition. This requirement includes usage during emergencies. {Title 17 CCR 93115.3(n)}	The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
AQ-39 The project owner shall maintain an operations log for this unit current and on-site, either at the engine location or at a on-site location, for a minimum of two (2) years, and for another year where it can be made available to the District staff within 5 working days from the District's request, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:	The project owner shall submit records required by this condition that demonstrating compliance with the sulfur content and engine use limitations of conditions AQ-36 and AQ-38 in the Annual Compliance Report, including	CEC/BLM
a. Date of each use and duration of each use (in hours);	a photograph showing the annual reading of engine hours. The project owner shall make the site available	
b. Reason for use (testing & maintenance, emergency, required emission testing);	for inspection of records by representatives of the District, ARB, and the Energy Commission.	
c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,	District, ARB, and the Energy Commission.	
d. Fuel sulfur concentration (the project owner may use the supplier's certification of sulfur content if it is maintained as part of this log).		
AQ-40 This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title 17 CCR 93115). In the event of conflict between these conditions and the ATCM, the requirements of the ATCM shall govern.	Not necessary.	CEC/BLM
AQ-41 This unit is subject to the requirements of the Federal National Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60 Subpart IIII).	The project owner shall submit the engine specifications at least 30 days prior to purchasing the engines for review and approval demonstrating that the engines meet NSPS and ARB ATCM emission limit requirements at the time of engine purchase.	CEC/BLM
Application No. 0001246 (One – Gasoline Storage Tank)		
UEQUIPMENT DESCRIPTION:		
One – Above ground gasoline storage tank and fuel receiving and dispensing equipment.		
AQ-42 The toll-free telephone number that must be posted is 1-800-635-4617.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-43 The project owner shall maintain a log of all inspections, repairs, and maintenance on equipment subject to Rule 461. Such logs or records shall be maintained at the facility for at least two (2) years and available to the District upon request. Records of Maintenance, Tests, Inspections, and Test Failures shall be maintained and available to District personal upon request; record form shall be similar to the Maintenance Record form indicated in EO VR-401-A, Figure 2N.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Con	dition of Certification	Verification	Responsible Agency
AIR	QUALITY (cont.)		
AQ- from	Any modifications or changes to the piping or control fitting of the vapor recovery system require prior approval the District.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ- othe	Pursuant to EO VR-401-A, vapor vent pipes are to be equipped with Husky 5885 pressure relief valves or as rwise allowed by EO.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-	46 The project owner shall perform the following tests within 60 days of construction completion and annually eafter in accord with the following test procedures:	The project owner shall notify the District at least 10 days prior to performing the required tests. The test	CEC/BLM
a.	Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Storage Tanks shall be conducted per EO VR-401-A Exhibit 4, and	results shall be submitted to the District within 30 days of completion of the tests and shall be made available to the CPM if requested.	
b.	Phase I Adapters, Emergency Vents, Spill Container Drain Valve, Dedicated gauging port with drop tube and tank components, all connections, and fittings shall NOT have any detectable leaks; test methods shall be per EO VR-401-A Table 2-1, and		
C.	Liquid Removal Test (if applicable) per TP-201.6, and		
	<ul> <li>Summary of Test Data shall be documented on a Form similar to EO VR-401-A Form 1</li> </ul>		
	<ul> <li>The District shall be notified a minimum of 10 days prior to performing the required tests with the final results submitted to the District within 30 days of completion of the tests.</li> </ul>		
	• District shall receive passing test reports no later than six (6) weeks prior to the expiration date of this permit.		
	Pursuant to California Health and Safety Code sections 39600, 39601 and 41954, this aboveground tank shall be alled and maintained in accordance with Executive Order (EO) VR-401-A for EVR Phase I, and Standing Loss irrements: http://www.arb.ca.gov/vapor/eos/eo-vr401/eo-vr401a/eo-401a.pdf.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
hang	itionally, Phase II Vapor Recovery System shall be installed and maintained per G-70-116-F with the exception that ging hardware shall be EVR Balance Phase II type hanging hardware (VST or other CARB Approved EVR Phase II dware).		
AQ- such	Pursuant to EO VR-401-A: Maintenance and repair of system components, including removal and installation of a components in the course of any required tests, shall be performed by OPW Certified Technicians.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
	49 Pursuant to EO VR-401-A, Maintenance Intervals for OPW; Tank Gauge Components; Dust Caps Emergency ts; Phase I Product and Vapor Adapters, and Spill Container Drain Valve, shall be conducted by an OPW trained nician annually.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
AIR QUALITY (cont.)		
AQ-50 The annual throughput of gasoline shall not exceed 600,000 gallons per year. Throughput Records shall be kept on site and available to District personnel upon request. Before this annual throughput can be increased the facility may be required to submit to the District a site specific Health Risk Assessment in accord with a District approved plan. In addition public notice and/or comment period may be required.	The project owner shall submit to the CPM gasoline throughput records demonstrating compliance with this condition as part of the Annual Compliance Report. The project owner shall maintain on site the annual gasoline throughput records and shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM
AQ-51 The project owner shall; install, maintain, and operate EVR Phase I in compliance with CARB Executive Order VR-401-A, and Phase II vapor recovery in accordance with G-70-116-F. In the event of conflict between these permit conditions and/or the referenced EO's the more stringent requirements shall govern.	The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.	CEC/BLM

Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES**

#### Designated Biologist Selection and Qualifications 1

**BIO-1** The Project owner shall assign at least one Designated Biologist to the Project. The Project owner shall submit the resume of the proposed Designated Biologist(s), with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with CDFG and USFWS.

The Designated Biologist must meet the following minimum qualifications:

- 1. Bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
- 2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;
- 3. Have at least one year of field experience with biological resources found in or near the Project area;
- 4. Meet the current USFWS Authorized Biologist qualifications criteria (www.fws.gov/ventura/speciesinfo/protocols\_guidelines), demonstrate familiarity with protocols and guidelines for the desert tortoise, and be approved by the USFWS; and
- 5. Possess a California ESA Memorandum of Understanding pursuant to Section 2081(a) for desert tortoise.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM, in consultation with CDFG and USFWS, that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

No fewer than 30 days prior to construction-related ground disturbance, the Project owner shall submit the names of the Designated Biologists(s) along with the completed USFWS Desert Tortoise Authorized Biologist Request Form

(www.fws.gov/ventura/speciesinfo/protocols\_guideline s) and submit it to the USFWS, and the CPM for review and final approval. No construction-related ground disturbance, grading, boring, or trenching shall commence until an approved Designated Biologist is available to be on site.

If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the Project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM and for consideration.

Genesis Solar Energy Project PA/FEIS G-18 August 2010

<sup>1</sup> USFWS <a href="www.fws.gov/ventura/speciesinfo/protocols\_guidelines/docs/dt> designates biologists who are approved to handle tortoises as "Authorized Biologists." Such biologists have demonstrated to the USFWS that they possess sufficient desert tortoise knowledge and experience to handle and move tortoises appropriately, and have received USFWS approval. Authorized Biologists are responsible for the implementation of all desert tortoise measures for which a project is approved and are permitted to then approve specific Biological Monitors to handle tortoises, at their discretion. The California Department of Fish and Game (CDFG) must also approve such biologists, potentially including individual approvals for Biological Monitors approved by the Authorized Biologist. Designated Biologists are the equivalent of Authorized Biologists. Only Designated Biologists and certain Biological Monitors who have been approved by the Designated Biologist would be allowed to handle desert tortoises.

Cond	lition of Certification	Verification	Responsible Agency	
BIOL	OGICAL RESOURCES (cont.)			
Desig	gnated Biologist Duties			
Biolog	The Project owner shall ensure that the Designated Biologist performs the activities described below during any nobilization activities, construction-related ground disturbance, grading, boring or trenching activities. The Designated gist may be assisted by the approved Biological Monitor(s) but remains the contact for the Project owner and the CPM. Designated Biologist Duties shall include the following:	The Designated Biologist shall provide copies of all written reports and summaries that document biological resources compliance activities in the Monthly Compliance Reports submitted to the CPM. If		
1.	Advise the Project owner's Construction and Operation Managers on the implementation of the biological resources conditions of certification;	actions may affect biological resources during operation a Designated Biologist shall be available for monitoring and reporting. During Project operation, the		
2.	Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the Project owner;	Designated Biologist shall submit record summaries in the Annual Compliance Report unless his or her duties		
3.	Be available to supervise, conduct and coordinate mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as special-status species or their habitat;	cease, as approved by the CPM.		
4.	Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;			
5.	Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way;			
6.	Notify the Project owner and the CPM of any non-compliance with any biological resources condition of certification;			
7.	Respond directly to inquiries of the CPM regarding biological resource issues;			
8.	Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the Monthly Compliance Report and the Annual Compliance Report;			
9.	Train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and USFWS guidelines on desert tortoise surveys and handling procedures <a href="https://www.fws.gov/ventura/speciesinfo/protocols_guidelines">www.fws.gov/ventura/speciesinfo/protocols_guidelines</a> ; and			
10.	Maintain the ability to be in regular, direct communication with representatives of CDFG, USFWS, and the CPM,			

including notifying these agencies of dead or injured listed species and reporting special-status species observations to the California Natural Diversity Database.

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
Biological Monitor Selection and Qualifications		
BIO-3 The Designated Biologist shall submit the resume, at least three references, and contact information of the proposed Biological Monitors to the CPM. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks. The Biological Monitor is the equivalent of the USFWS designated Desert Tortoise Monitor (USFWS 2008).  Biological Monitor(s) training by the Designated Biologist shall include familiarity with the conditions of certification, BRMIMP, WEAP, and USFWS guidelines on desert tortoise surveys and handling procedures <a href="https://www.fws.gov/ventura/speciesinfo/protocols_guidelines">www.fws.gov/ventura/speciesinfo/protocols_guidelines</a> .	The Project owner shall submit the specified information to the CPM for approval at least 30 days prior to the start of any site mobilization or construction-related ground disturbance, grading, boring and trenching. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) has been trained including the date when training was completed. If additional biological monitors are needed during construction the specified information shall be submitted to the CPM and for approval at least 10 days prior to their first day of monitoring activities.	
Biological Monitor Duties		
BIO-4 The Biological Monitors shall assist the Designated Biologist in conducting surveys and in monitoring of site mobilization activities, construction-related ground disturbance, fencing, grading, boring, trenching and reporting. The Designated Biologist shall remain the contact for the Project owner and the CPM.	The Designated Biologist shall submit in the Monthly Compliance Report to the CPM copies of all written reports and summaries that document biological resources compliance activities, including those conducted by Biological Monitors. If actions may affect biological resources during operation a Biological Monitor, under the supervision of the Designated Biologist, shall be available for monitoring and reporting. During Project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report unless their duties cease, as approved by the CPM.	
Designated Biologist and Biological Monitor Authority		
BIO-5 The Project owner's construction/operation manager shall act on the advice of the Designated Biologist and Biological Monitor(s) to ensure conformance with the biological resources conditions of certification. The Project owner shall provide Energy Commission staff with reasonable access to the Project site under the control of the Project owner and shall otherwise fully cooperate with the Energy Commission's efforts to verify the Project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The Designated Biologist shall have the authority to immediately stop any activity that is not in compliance with these conditions and/or order any reasonable measure to avoid take of an individual of a listed species. If required by the Designated Biologist and Biological Monitor(s)	The Project owner shall ensure that the Designated Biologist or Biological Monitor notifies the CPM immediately (and no later than the morning following the incident, or Monday morning in the case of a weekend) of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, or operation activities. The Project owner	

Con	ndition of Certification	Verification	Responsible Agency
ВЮ	LOGICAL RESOURCES (cont.)		
	Project owner's construction/operation manager shall halt all site mobilization, ground disturbance, grading, boring, ching and operation activities in areas specified by the Designated Biologist. The Designated Biologist shall:	shall notify the CPM of the circumstances and actions being taken to resolve the problem.	
1.	Require a halt to all activities in any area when determined that there would be an unauthorized adverse impact to biological resources if the activities continued;	Whenever corrective action is taken by the Project owner, a determination of success or failure will be	
2.	Inform the Project owner and the construction/operation manager when to resume activities; and	made by the CPM within five working days after receipt of notice that corrective action is completed, or the	
3.	Notify the CPM if there is a halt of any activities and advise them of any corrective actions that have been taken or would be instituted as a result of the work stoppage.	Project owner would be notified by the CPM that coordination with other agencies would require	
	e Designated Biologist is unavailable for direct consultation, the Biological Monitor shall act on behalf of the Designated ogist.	additional time before a determination can be made.	
Wor	rker Environmental Awareness Program (WEAP)		
inclu subo	The Project owner shall develop and implement a Project-specific Worker Environmental Awareness Program EAP) and shall secure approval for the WEAP from the CPM. The WEAP shall be administered to all onsite personnel uding surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, contractors, and delivery personnel. The WEAP shall be implemented during site preconstruction, construction, operation, closure. The WEAP shall:	At least 30 days prior to start of construction-related ground disturbance the Project owner shall provide to the CPM a copy of the final WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of	
1.	Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants;	the person(s) administering the program.  The Project owner shall provide in the Monthly Compliance Report the number of persons who have	
2.	Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas, and explain the reasons for protecting these resources; provide information to participants that no snakes, reptiles, or other wildlife shall be harmed;	completed the training in the prior month and a running total of all persons who have completed the training to date. At least 10 days prior to construction-related ground disturbance activities the Project owner shall	
3.	Place special emphasis on desert tortoise, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;	submit two copies of the CPM-approved final WEAP.  Training acknowledgement forms signed during construction shall be kept on file by the Project owner	
4.	Include a discussion of fire prevention measures to be implemented by workers during Project activities; request workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;	for at least six months after the start of commercial operation.	
5.	Describe the temporary and permanent habitat protection measures to be implemented at the Project site;	Throughout the life of the Project, the WEAP shall be	
6.	Identify whom to contact if there are further comments and questions about the material discussed in the program; and	repeated annually for permanent employees, and shall be routinely administered within one week of arrival to	
7.	Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.	any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the Project area. Upon completion of	
The	specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.	the orientation, employees shall sign a form stating	

Conc	dition of Certification	Verification	Responsible Agency
BIOL	OGICAL RESOURCES (cont.)		
		that they attended the program and understand all protection measures. These forms shall be maintained by the Project owner and shall be made available to the CPM and upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training.	
		During Project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.	
Biolo	ogical Resources Mitigation Implementation and Monitoring Plan		
imple meas Conc other The E depic	The Project owner shall develop a Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP), shall submit two copies of the proposed BRMIMP to the CPM for review and approval. The Project owner shall ement the measures identified in the approved BRMIMP. The BRMIMP shall incorporate avoidance and minimization sures described in final versions of the Desert Tortoise Translocation Plan, the Raven Management Plan, the Closure, ceptual Restoration Plan, the Burrowing Owl Mitigation and Monitoring Plan, and the Weed Management Plan, and all individual biological mitigation and/or monitoring plans associated with the Project.  BRMIMP shall be prepared in consultation with the Designated Biologist and shall include accurate and up-to-date maps string the location of sensitive biological resources that require temporary or permanent protection during construction operation. The BRMIMP shall include complete and detailed descriptions of the following:  All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the Project owner;	The Project owner shall submit the draft BRMIMP to the CPM at least 30 days prior to start of any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and the final BRMIMP at least 7 days prior to start of any construction-related ground disturbance, grading, boring, and trenching. The BRMIMP shall contain all of the required measures included in all biological Conditions of Certification. No construction-related ground disturbance, grading, boring or trenching may occur prior to approval of the final BRMIMP by the CPM.	
2.	All biological resources conditions of certification identified as necessary to avoid or mitigate impacts;	If any permits have not yet been received when the final	
3.	All biological resource mitigation, monitoring and compliance measures required in federal agency terms and conditions, such as those provided in the USFWS Biological Opinion;	BRMIMP is submitted, these permits shall be submitted to the CPM within 5 days of their receipt, and the BRMIMP shall be revised or supplemented to reflect the	
4.	All sensitive biological resources to be impacted, avoided, or mitigated by Project construction, operation, and closure;	permit condition(s). The Project owner shall submit to the CPM the revised or supplemented BRMIMP within	
5.	All required mitigation measures for each sensitive biological resource;	10 days following the Project owner's receipt of any additional permits. Under no circumstances shall ground	
6.	All measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;	disturbance proceed without implementation of all permit conditions.	
7.	Duration for each type of monitoring and a description of monitoring methodologies and frequency;		
8.	Performance standards to be used to help decide if/when proposed mitigation is or is not successful;	To verify that the extent of construction disturbance does not exceed that described in this analysis, the Project	
9.	All performance standards and remedial measures to be implemented if performance standards are not met;	owner shall submit aerial photographs, at an approved scale, taken before and after construction to the CPM. The first set of aerial photographs shall reflect site	

			1
Con	dition of Certification	Verification	Responsible Agency
BIOL	OGICAL RESOURCES (cont.)		
10. 11. 12.	Biological resources-related facility closure measures including a description of funding mechanism(s);  A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and  A requirement to submit any sightings of any special-status species that are observed on or in proximity to the Project site, or during Project surveys, to the California Natural Diversity Data Base (CNDDB) per CDFG requirements.	conditions <u>prior</u> to any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and shall be submitted prior to initiation of such activities. The second set of aerial photographs shall be taken <u>subsequent</u> to completion of construction, and shall be submitted to the CPM no later than 90 days after completion of construction. The Project owner shall also provide a final accounting of the acreages of vegetation communities/cover types present before and after construction.  Any changes to the approved BRMIMP must be approved by the CPM and in consultation with CDFG and USFWS.  Implementation of BRMIMP measures (for example, construction activities that were monitored, species observed) shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, a written construction termination report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the Project's preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and which mitigation and monitoring items are still outstanding.	
Impa	ct Avoidance and Minimization Measures		
BIO- mani 1.	The Project owner shall undertake the following measures to manage the construction site and related facilities in a ner to avoid or minimize impacts to biological resources: <u>Limit Disturbance Areas</u> . The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. Spoils and topsoil shall be stockpiled in disturbed areas lacking native vegetation and which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat. All disturbances, Project vehicles and equipment shall be confined to the flagged areas.	If loud construction activities are proposed between February 15 to April 15 which would result in noise levels over 65 dBA in nesting habitat, the Project owner shall submit nest survey results (as described in 9a) to the CPM no more than 7 days before initiating such construction. If an active nest is detected within this survey area the Project owner shall submit a Nesting Bird Monitoring and Management Plan to the CPM for review and approval no more than 7 days	

before initiating noisy construction.

2. <u>Minimize Road Impacts</u>. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do

Con	dition of Certification	Verification	Responsible Agency
ВІО	LOGICAL RESOURCES (cont.)		
	so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.	All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be	
3.	Minimize Traffic Impacts. Vehicular traffic during Project construction and operation shall be confined to existing routes of travel to and from the Project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 25 miles per hour on all dirt roads and 45 mph on all paved roads. Signs shall be established at appropriate locations (for example, at Arizona crossings of drainages) to remind drivers to be aware of the potential for desert tortoise and other wildlife occurring on the roadways.	reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.	
4.	Monitor During Construction. In areas that have not been fenced with desert tortoise exclusion fencing and cleared, including during fence construction, the Designated Biologist shall be present at the construction site during all Project activities that have potential to disturb soil, vegetation, and wildlife. The Designated Biologist or Biological Monitor shall walk immediately ahead of equipment during brushing and grading activities in unfenced habitat (i.e., outside of the cleared and fenced Plant Site).		
5.	Minimize Impacts of Pipeline Alignments, Roads, Staging Areas. Staging areas for construction on the plant site shall be within the area that has been fenced with desert tortoise exclusion fencing and cleared. For construction activities outside of the plant site (transmission line, pipeline alignments) access roads, pulling sites, and storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources.		
6.	Implement APLIC Guidelines. Transmission lines, fiber optic lines, and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 1994) and Mitigating Bird Collisions with Power Lines (APLIC 2006) to reduce the likelihood of large bird electrocutions and collisions.		
7.	Avoid Use of Toxic Substances. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.		
8.	Minimize Lighting Impacts. Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards wildlife habitat. Lighting shall be kept to the minimum level for safety and security needs by using motion or infrared light sensors and switches to keep lights off when not required, and shielding operational lights downward to minimize skyward illumination. No high intensity, steady burning, bright lights such as sodium vapor or spotlights shall be used. FAA visibility lighting shall employ only strobed, strobe-like or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used.		
9.	Minimize Noise Impacts. A continuous low-pressure technique shall be used for steam blows, to the extent possible, in order to reduce noise levels in sensitive habitat proximate to the Genesis Project. Loud construction activities (e.g., unsilenced high pressure steam blowing and pile driving, or other) shall be avoided from February 15 to April 15 when it would result in noise levels over 65 dBA in nesting habitat (excluding noise from passing vehicles). Loud construction activities may be permitted from February 15 to April 15 only if:		

Con	Condition of Certification		Verification	Responsible Agency
BIO	_OGI	CAL RESOURCES (cont.)		
	a.	the Designated Biologist provides documentation (i.e., nesting bird data collected using methods described in BIO-15 and maps depicting location of the nest survey area in relation to noisy construction) to the CPM indicating that no active nests would be subject to 65 dBA noise, OR		
	b.	the Designated Biologist or Biological Monitor monitors active nests within the range of construction-related noise exceeding 65dBA. The monitoring shall be conducted in accordance with the Nesting Bird Monitoring and Management Plan approved by the CPM. The Plan shall include adaptive management measures to prevent disturbance to nesting birds from construction related noise. Triggers for adaptive management shall be evidence of Project-related disturbance to nesting birds such as: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Bird Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the Designated Biologist to be the source of disturbance to the nesting bird.		
10.	exc mov obs Biol	id Vehicle Impacts to Desert Tortoise. Parking and storage shall occur within the area enclosed by desert tortoise lusion fencing to the extent feasible. No vehicles or construction equipment parked outside the fenced area shall be red prior to an inspection of the ground beneath the vehicle for the presence of desert tortoise. If a desert tortoise is erved, it shall be left to move on its own. A Designated Biologist or Biological Monitor under the Designated ogist's direct supervision may remove and relocate the animal to a safe location as described in the Applicant's sert Tortoise Translocation Plan.		
11.		oid Wildlife Pitfalls: To avoid trapping desert tortoise and other wildlife in trenches, pipes or culverts, the following asures shall be implemented:		
	a.	Backfill Trenches. At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) outside the area fenced with desert tortoise exclusion fencing have been backfilled. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise-exclusion fencing. All trenches, bores, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically throughout the day, at the end of each workday and at the beginning of each day by the Designated Biologist or a Biological Monitor. Should a tortoise or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the individual as described in the Desert Tortoise Translocation Plan. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.		
	b.	Avoid Entrapment of Desert Tortoise. Any construction pipe, culvert, or similar structure with a diameter greater than 3 inches, stored less than 8 inches aboveground and within desert tortoise habitat (i.e., outside the permanently fenced area) for one or more nights, shall be inspected for tortoises before the material is moved, buried or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on elevated pipe racks. These materials would not need to be inspected or capped if they are stored within the permanently fenced area after the clearance surveys have been completed.		
12.	aba	imize Standing Water. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust tement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the nation of puddles, which could attract desert tortoises and common ravens to construction sites. A Biological		

Condition of Certification		Verification	Responsible Agency
BIOL	LOGICAL RESOURCES (cont.)		
	Monitor shall patrol these areas to ensure water does not puddle and shall take appropriate action to reduce water application where necessary.		
13.	Dispose of Road-killed Animals. During construction, road killed animals or other carcasses detected by personnel on roads associated with the Project area will be reported immediately to a Biological Monitor or Designated Biologists, who will remove the roadkill promptly. During operations, the Project Environmental Compliance Monitor will be notified of any roadkills and promptly remove and dispose of any roadkills. For special-status species road-kill, the Biological Monitor shall contact CDFG and USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in BIO-11 below.		
14.	Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the Project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.		
15.	Worker Guidelines. During construction all trash and food-related waste shall be placed in self-closing containers and removed daily from the site. Workers shall not feed wildlife or bring pets to the Project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons. Vehicular traffic shall be confined to existing routes of travel to and from the Project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit when traveling on dirt access routes within desert tortoise habitat shall not exceed 25 miles per hour.		
16.	Implement Erosion Control Measures. Standard erosion control measures shall be implemented for all phases of construction and operation where sediment run-off from exposed slopes threatens to enter "Waters of the State". Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the Project site shall be stabilized to reduce erosion potential, both during and following construction. Areas of disturbed soils (access and staging areas) with slopes toward drainages shall be stabilized to reduce erosion potential.		
17.	Monitor Ground Disturbing Activities Prior to Pre-Construction Site Mobilization. If pre-construction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife.		
Dese	ert Tortoise Clearance Surveys and Fencing		
torto the U	The Project owner shall undertake appropriate measures to manage the construction site and related facilities in a ner to avoid or minimize impacts to desert tortoise. Methods for clearance surveys, fence specification and installation, ise handling, artificial burrow construction, egg handling and other procedures shall be consistent with those described in JSFWS' 2009 Desert Tortoise Field Manual <a href="http://www.fws.gov/ventura/speciesinfo/protocols_guidelines">http://www.fws.gov/ventura/speciesinfo/protocols_guidelines</a> or more ent guidance provided by CDFG and USFWS. The Project owner shall also implement all terms and conditions described e Biological Opinion prepared by USFWS. These measures include, but are not limited to, the following:	All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of desert tortoise clearance surveys the Designated Biologist shall submit a report to the CPM, USFWS,	

Co	ondition of Certification Verificati		Verification	Responsible Agency
ВІС	DLOG	SICAL RESOURCES (cont.)		
1.	imp sec des way of the tech USI The tran cen burn eac des	sert Tortoise Exclusion Fence Installation. Per the Applicant's Desert Tortoise Translocation Plan, in order to avoid acts to desert tortoises, permanent desert tortoise exclusion fencing shall be installed along the permanent perimeter urity fence; along the utility corridors, temporary desert tortoise exclusion fencing or monitoring will be used to protect ert tortoises during construction. The proposed alignments for the permanent perimeter fence and utility rights-of-vencing shall be flagged and surveyed within 24 hours prior to the initiation of fence construction. Clearance surveys the perimeter fence and utility rights-of-way alignments shall be conducted by the Designated Biologist(s) using single of the USFWS' 2009 Desert Tortoise Field Manual and may be conducted in any season with the FWS and CDFG approval. Biological Monitors may assist the Designated Biologist under his or her supervision. See fence clearance surveys shall provide 100-percent coverage of all areas to be disturbed and an additional seet along both sides of the fence line. This fence line transect shall cover an area approximately 90 feet wide tered on the fence alignment. Transects shall be no greater than 15 feet apart. All desert tortoise burrows, and rows constructed by other species that might be used by desert tortoises, shall be examined to assess occupancy of h burrow by desert tortoises and handled in accordance with the USFWS' 2009 Desert Tortoise Field Manual. Any ert tortoise located during fence clearance surveys shall be handled by the Designated Biologist(s) in accordance in the Applicant's Translocation Plan.	and CDFG describing implementation of each of the mitigation measures listed above. The report shall include the desert tortoise survey results, capture and release locations of any translocated desert tortoises, and any other information needed to demonstrate compliance with the measures described above.	
	a.	Timing, Supervision of Fence Installation. The exclusion fencing shall be installed prior to the onset of site clearing and grubbing. The fence installation shall be supervised by the Designated Biologist and monitored by the Biological Monitors to ensure the safety of any tortoise present.		
	b.	Fence Material and Installation. The permanent tortoise exclusionary fencing shall be constructed in accordance with the USFWS' 2009 <i>Desert Tortoise Field Manual</i> (Chapter 8 – Desert Tortoise Exclusion Fence).		
	C.	Security Gates. Security gates shall be designed with minimal ground clearance to deter ingress by tortoises. The gates may be electronically activated to open and close immediately after the vehicle(s) have entered or exited to prevent the gates from being kept open for long periods of time.		
	d.	Fence Inspections. Following installation of the desert tortoise exclusion fencing for both the permanent site fencing and temporary fencing in the utility corridors, the fencing shall be regularly inspected. If tortoise were moved out of harm's way during fence construction, permanent and temporary fencing shall be inspected at least two times a day for the first 7 days to ensure a recently moved tortoise has not been trapped within the fence. Thereafter, permanent fencing shall be inspected monthly and during and within 24 hours following all major rainfall events. A major rainfall event is defined as one for which flow is detectable within the fenced drainage. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within 48 hours of observing damage. Inspections of permanent site fencing shall occur for the life of the project. Temporary fencing shall be inspected weekly and, where drainages intersect the fencing, during and within 24 hours following major rainfall events. All temporary fencing shall be repaired immediately upon discovery and, if the fence may have permitted tortoise entry while damaged, the Designated Biologist shall inspect the area for tortoise.		
2.	fend the acc Tor	sert Tortoise Clearance Surveys within the Plant Site. Following construction of the permanent perimeter security be and the attached tortoise exclusion fence, the permanently fenced power plant site shall be cleared of tortoises by Designated Biologist, who may be assisted by the Biological Monitors. Clearance surveys shall be conducted in ordance with the USFWS' 2009 Desert Tortoise Field Manual (Chapter 6 – Clearance Survey Protocol for the Desert toise – Mojave Population) and shall consist of two surveys covering 100 percent of the project area by walking sects no more than 15-feet apart. If a desert tortoise is located on the second survey, a third survey shall be		

Co	Condition of Certification		Verification	Responsible Agency
BI	BIOLOGICAL RESOURCES (cont.)			
conducted. On each subsequent pass surveyors shall attempt to view all shrubs and the terrain from as many angles as possible. To achieve this, transects programmed into GPS units shall be either perpendicular, parallel but offset from transect on the previous pass, and/or approached from the opposite direction on each subsequent pass. Clearance surveys of the power plant site may only be conducted when tortoises are most active (April through May or September through October). Surveys outside of these time periods require approval by USFWS and CDFG. Any tortoise located during clearance surveys of the power plant site shall be relocated and monitored in accordance with the Desert Tortoise Translocation Plan.				
	a.	Burrow Searches. During clearance surveys all desert tortoise burrows, and burrows constructed by other species that might be used by desert tortoises, shall be examined by the Designated Biologist, who may be assisted by the Biological Monitors, to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' 2009 Desert Tortoise Field Manual. To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined, in accordance with the Desert Tortoise Translocation Plan. Tortoises taken from burrows and from elsewhere on the power plant site shall be relocated or translocated as described in the Desert Tortoise Translocation Plan.		
	b.	Burrow Excavation/Handling. All potential desert tortoise burrows located during clearance surveys shall be excavated by hand, tortoises removed, and collapsed or blocked to prevent occupation by desert tortoises, in accordance with the Desert Tortoise Translocation Plan. All desert tortoise handling and removal, and burrow excavations, including nests, shall be conducted by the Designated Biologist, who may be assisted by a Biological Monitor in accordance with the USFWS' 2009 <i>Desert Tortoise Field Manual</i> .		
3.	corrid and t activi	toring Following Clearing. Following the desert tortoise clearance and removal from the power plant site and utility dors, workers and heavy equipment shall be allowed to enter the Project site to perform clearing, grubbing, leveling, trenching activities. A Designated Biologist or Biological Monitor shall be on site during clearing and grading ities to move tortoises missed during the initial tortoise clearance survey. Should a tortoise be discovered, it shall be ated or translocated as described in the Desert Tortoise Translocation Plan.		
4.	locat heali techr e) an tortoi	orting. The Designated Biologist shall record the following information for any desert tortoises handled: a) the ions (narrative and maps) and dates of observation; b) general condition and health, including injuries, state of ng and whether desert tortoise voided their bladders; c) location moved from and location moved to (using GPS nology); d) gender, carapace length, and diagnostic markings (i.e., identification numbers or marked lateral scutes); nbient temperature when handled and released; and f) digital photograph of each handled desert tortoise. Desert is moved from within Project areas shall be marked and monitored in accordance with the Desert Tortoise slocation Plan.		
5.	impa secu	ert Tortoise Exclusion Fence Installation. Per the Applicant's Desert Tortoise Translocation Plan, in order to avoid cts to desert tortoises, permanent desert tortoise exclusion fencing shall be installed along the permanent perimeter rity fence; along the utility corridors, temporary desert tortoise exclusion fencing or monitoring will be used to protect rt tortoises during construction.		

CONDITIONS OF SERVICION					
Condition of Certification	Verification	Responsible Agency			
BIOLOGICAL RESOURCES (cont.)					
Desert Tortoise Translocation Plan					
BIO-10 The Project owner shall develop and implement a final Desert Tortoise Translocation Plan (Plan) that is consistent with current USFWS approved guidelines, and meets the approval of the CPM. The goals of the Desert Tortoise Translocation Plan shall be to: relocate/translocate all desert tortoises from the project site to nearby suitable habitat; minimize impacts on resident desert tortoises outside the project site; minimize stress, disturbance, and injuries to Plan shall be based on the draft Desert Tortoise Translocation Plan submitted by the Applicant (TTEC 2010a) and shall include all revisions deemed necessary by USFWS, CDFG and Energy Commission staff.  Within 30 days prior to site mobilization or construction-related ground disturbance, the Project street owner shall provide the CPM with the final version. Plan that has been reviewed and approved by the CPM in consultation with USFWS and CDFG. All modifications to the approved Plan shall be made of after approval by the CPM, in consultation with USFWS and CDFG.					
	Within 30 days after initiation of relocation and/or translocation activities, the Designated Biologist shall provide to the CPM for review and approval, a written report identifying which items of the Plan have been completed, and a summary of all modifications to measures made during implementation of the Plan.				
Desert Tortoise Compliance Verification					
BIO-11 The Project owner shall provide Energy Commission staff with reasonable access to the Project site and compensation lands under the control of the Project owner and shall otherwise fully cooperate with the Energy Commission's efforts to verify the Project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The Project owner shall hold the Designated Biologist and the Energy Commission harmless for any costs the Project owner shall hold the Designated Biologist and the Energy Commission harmless for any costs the Project owner shall deliver to the CPM, CDFG, and USFWS via FAX or electronic communication the written report from the Designated Biologist. The Designated Biologist shall do all of the following:  1. Notification. Notify the CPM and at least 14 calendar days before initiating construction-related ground disturbance activities immediately potify the CPM in writing if the Project owner is not in complying with the above required notification of a sighting, injury, kill, or relocation of a listed species, the Project owner shall deliver to the CPM, CDFG, and USFWS via FAX or electronic communication the written report from the Designated Biologist describing all reported incidents of injury, kill, or relocation of a sighting, injury, kill, or relocation of a sighting, injury, kill, or relocation of a sighting injury, kill, or relocation of a sighting, injury, kill, or relocation of a sighting injury, kill, or relocation of a sighting injury, kill, or relocation of a sighting, injury, kill, or relocation of a sighting i					
certification, including but not limited to any actual or anticipated failure to implement mitigation measures within the time periods specified in the conditions of certification.  2. Monitoring During Grubbing and Grading. Remain onsite daily in areas located outside of permanent desert tortoise	the case of a sighting in an active construction area, the Project owner shall, at the same time, submit a map (e.g., using Geographic Information Systems) depicting both the limits of construction and sighting				
exclusion fencing while vegetation salvage, grubbing, grading and other ground-disturbance construction activities are taking place to avoid or minimize take of listed species, and verify personally or use Biological Monitors to check for compliance with all impact avoidance and minimization measures, including checking all exclusion zones to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protective zones.	location to the CPM, CDFG and USFWS.  No later than 45 days after initiation of Project operation the Designated Biologist shall provide the CPM a Final Listed Species Mitigation Report that				
3. <u>Monthly Compliance Inspections</u> . Conduct compliance inspections at a minimum of once per month after clearing, grubbing, and grading are completed and submit a monthly compliance report to the CPM, USFWS, and CDFG during construction.	includes, at a minimum: 1) a copy of the table in the BRMIMP with notes showing when each of the mitigation measures was implemented; 2) all available information about Project-related incidental take of				

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
4. Notification of Injured or Dead Listed Species. If an injured or dead listed species is detected within or near the Project Disturbance Area the CPM, CDFG, and USFWS shall be notified immediately by phone. Notification shall occur no later than noon on the business day following the event if it occurs outside normal business hours so that the agencies can determine if further actions are required to protect listed species. Written follow-up notification via FAX or electronic communication shall be submitted to these agencies within two calendar days of the incident and shall include the following information as relevant:	listed species; 3) information about other Project impacts on the listed species; 4) construction dates; 5) an assessment of the effectiveness of conditions of certification in minimizing and compensating for Project impacts; 6) recommendations on how mitigation measures might be changed to more effectively minimize and mitigate the impacts of future Projects on the listed species; and 7) any other pertinent information, including the level of take of the listed species associated with the Project.	
a. <u>Injured Desert Tortoise</u> . If a desert tortoise is injured as a result of Project-related activities during construction, the Designated Biologist or approved Biological Monitor shall immediately take it to a CDFG-approved wildlife rehabilitation and/or veterinarian clinic. Any veterinarian bills for such injured animals shall be paid by the Project owner. Following phone notification as required above, the CPM, CDFG, and USFWS shall determine the final disposition of the injured animal, if it recovers. Written notification shall include, at a minimum, the date, time, location, circumstances of the incident, and the name of the facility where the animal was taken.		
b. <u>Desert Tortoise Fatality.</u> If a desert tortoise is killed by Project-related activities during construction or operation, a written report with the same information as an injury report shall be submitted to the CPM, CDFG, and USFWS. These desert tortoises shall be salvaged according to guidelines described in <i>Salvaging Injured, Recently Dead, III, and Dying Wild, Free-Roaming Desert Tortoise</i> (Berry 2001). The Project owner shall pay to have the desert tortoises transported and necropsied. The report shall include the date and time of the finding or incident.		
5. Stop Work Order. The CPM may issue the Project owner a written stop work order to suspend any activity related to the construction or operation of the Project to prevent or remedy a violation of one or more conditions of certification (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. The Project owner shall comply with the stop work order immediately upon receipt thereof.		
Desert Tortoise Compensatory Mitigation		
<b>BIO-12</b> To fully mitigate for habitat loss and potential take of desert tortoise, the Project owner shall provide compensatory mitigation at a 1:1 ratio for impacts to 1750 acres, and at a 5:1 ratio for impacts to 24 acres of critical habitat, adjusted to reflect the final Project footprint. For purposes of this condition, the Project footprint means all lands disturbed in the	The Project owner shall provide the CPM with written notice at least 30 days prior to the start of ground-disturbing activities on the Project site.	
uction and operation of the Genesis Project, including all linears, as well as undeveloped areas inside the Project's aries that will no longer provide viable long-term habitat for the desert tortoise. To satisfy this condition, the Project shall acquire, protect and transfer no fewer than 1,870 acres of desert tortoise habitat lands (adjusted to reflect the roject footprint), and shall also provide funding for the initial improvement and long-term maintenance and gement of the acquired lands, and comply with other related requirements in this condition. Costs of these requirements timated to be \$4,263,600 based on the acquisition of 1,870 acres and estimated per-acre costs of \$500 for acquisition, for initial habitat improvement, and \$1,450 for long-term management. The actual costs to comply with this condition	If the mitigation actions required under this condition are not completed at least 30 days prior to the start of ground-disturbing activities, the Project owner shall provide the CPM with approved Security at least 30 days prior to the start of Project ground-disturbing activities.	
will vary depending on the final footprint of the Project, the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. The 1,870-acre habitat requirement, and associated funding requirements based on that acreage, will be adjusted up or down if there are changes in the final footprint of the Project.	No later than 12 months after the start of ground-disturbing Project activities, the Project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase, and shall obtain approval from the CPM, in consultation with	

#### Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES (cont.)**

Condition **BIO-29** may provide the Project owner with another option for satisfying some or all of the requirements in this condition.

The requirements for the acquisition, initial improvement, protection and long-term maintenance and management of compensation lands include all of the following:

- a. <u>Selection Criteria for Compensation Lands</u>. The quality and function of the compensation lands selected for acquisition shall be equal to or better than the quality and function of the habitat impacted and:
  - a be within the Colorado Desert Recovery Unit, with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands:
  - b. provide habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed;
  - be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
  - d. be connected to lands where desert tortoises can be reasonably expected to occur based on habitat or historic occurrences, ideally with populations that are stable, recovering, or likely to recover;
  - e. not have a history of intensive recreational use or other disturbance that does not have the capacity to regenerate naturally when disturbances are removed or might make habitat recovery and restoration infeasible;
  - f. not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;
  - g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and
  - h. have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights.
- b. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above, and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition.
- c. <u>Compensation Lands Acquisition Requirements.</u> The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, in consultation with CDFG, BLM and the USFWS, has approved the proposed compensation lands:
  - a. <u>Preliminary Report.</u> The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with CDFG, BLM and the

CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the Project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM, CDFG, BLM, and USFWS of such completion, no later than 18 months after the start of Project ground-disturbing activities. If NFWF or another approved third party is being used for the acquisition, the Project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

The Project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition. The Project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands, the Project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

nditior	of Certification	Verification	Responsib Agency
OLOGI	CAL RESOURCES (cont.)		
b.	USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.  Title/Conveyance. The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM in an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM, in consultation with CDFG, of the terms of any transfer of fee title or conservation easement to the compensation lands.  Initial Protection and Habitat Improvement. The Project owner shall fund activities that the CPM, in consultation with the CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The cost of these activities is estimated at \$330 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the hab	The Project owner, or an approved third party, shall provide the CPM, CDFG, BLM and USFWS with a management plan for the compensation lands within180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.  Within 90 days after completion of all project related ground disturbance, the Project owner shall provide to the CPM, CDFG, BLM and USFWS an analysis, based on aerial photography, with the final accounting of the amount of habitat disturbed during Project construction. This shall be the basis for the final number of acres required to be acquired.	
<u>d.</u> <u>e.</u>	Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.  Long-term Maintenance and Management Funding. The Project owner shall provide money to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like		
	analysis conducted for the compensation lands. The amount of required funding is initially estimated to be \$1,450 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall either provide initial payment of \$2,711,500 (calculated at \$1,450 an acre for 1,870 acres) or the Project owner shall include \$2,711,500 to reflect this amount in the security that is provided to the Energy Commission under section 3.h. of this condition. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project footprint as described above. If		

an initial payment is made based on the estimated per-acre costs, the Project owner shall deposit additional

Condition	of C	ertification	Verification	Responsible Agency
BIOLOGIC	CAL R	RESOURCES (cont.)		
	money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than \$1,450 an acre will be required for long-term maintenance and management, the excess paid will be returned to the Project owner. The Project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the Project's long-term maintenance and management funds.			
		Project owner shall ensure that an agreement is in place with the long-term maintenance and management d holder/manager to ensure the following requirements are met:		
	i.	Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM in consultation with CDFG and is designed to protect or improve the habitat values of the compensation lands.		
	ii.	<u>Withdrawal of Principal</u> . The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.		
	iii.	Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM and CDFG.		
f.	rela and con	ter expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs ated to acquisition of compensation lands and conservation easements, including but not limited to the title document review costs incurred from other state agency reviews, overhead related to providing appensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants arance, and other site cleanup measures.		
g.	con	nagement plan. The Project owner or approved third party shall prepare a management plan for the nepensation lands in consultation with the entity that will be managing the lands. The plan shall be submitted approval of the CPM, in consultation with CDFG, BLM, and USFWS.		
h.	doc miti Pro a pl	gation Security. The Project owner shall provide financial assurances to the CPM, with copies of the final nument to CDFG, to guarantee that an adequate level of funding is available to implement any of the gation measures required by this condition that are not completed prior to the start of ground-disturbing ject activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, ledged savings account or another form of security ("Security") approved by the CPM in consultation with FG. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval, in		

Condition	of Certification	Verification	Responsible Agency
BIOLOGIC	BIOLOGICAL RESOURCES (cont.)		
	consultation with CDFG, of the form of the Security. The CPM may draw on the Security if the CPM determines the Project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition. The Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.		
	Security shall be provided in the amount of \$4,263,600, calculated as follows but adjusted as specified below:		
	i. land acquisition costs for compensation land, calculated at \$500/acre = \$935,000.		
	ii. initial protection and habitat improvement activities on the compensation land, calculated at \$330/acre = \$617,100.		
	iii. long-term maintenance and management on the compensation land calculated at \$1,450/acre = \$2,711,500.		
	The amount of security shall be adjusted for any change in the Project footprint as described above. In addition, the amount of Security specified in this section may be reduced in proportion to any of the secured mitigation requirements that the Project owner has completed at the time the Security is required to be submitted. For example, if the Project owner transfers funds for long-term management of the compensation lands to an entity approved to hold those funds, the Security would not include any amount for long-term maintenance and management of the lands. The Project owner will be entitled to partial or complete release of the Security as the secured mitigation requirements are successfully completed.		
i.	The Project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the Project owner, the Project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, or the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the Project owner.		
	The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.		

Condition of Certification Verification		Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
Raven Management Plan		
RIO-13 The Project owner shall implement a rayen monitoring and control plan that is consistent with the most current	No less than 30 days prior to any construction-related	

BIO-13 The Project owner shall implement a raven monitoring and control plan that is consistent with the most current USFWS-approved raven management guidelines, and which meets the approval of the CPM, in consultation with USFWS. The draft Common Raven Monitoring, Management, and Control Plan (Raven Plan) submitted by the Applicant (TTEC 2010r) shall provide the basis for the final plan, subject to review and revisions and approval from the CPM and USFWS. The Raven Plan shall include but not be limited to a program to monitor increased raven presence in the Project vicinity and to implement raven control measures as needed based on that monitoring. The purpose of the plan is to avoid any Project-related increases in raven numbers during construction, operation, and decommissioning. The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring proposed in the Raven Plan. In addition, to offset the cumulative contributions of the Project to desert tortoise from increased raven numbers, the Project owner shall also contribute to the USFWS Regional Raven Management Program. The Project owner shall do all of the following:

- 1. Prepare and Implement a Raven Management Plan that includes the following:
  - a. Identify conditions associated with the Project that might provide raven subsidies or attractants;
  - Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities;
  - c. Describe control practices for ravens;
  - d. Address monitoring and nest removal during construction and for the life of the Project, and;
  - e. Discuss reporting requirements.
- Contribute to the USFWS Regional Raven Management Program. The project owner shall submit payment to the
  project sub-account of the REAT Account held by the National Fish and Wildlife Foundation (NFWF) to support the
  USFWS Regional Raven Management Program. The amount shall be a one-time payment of \$105 per acre of
  permanent disturbance.

No less than 30 days prior to any construction-related ground disturbance activities, the Project owner shall provide the CPM, USFWS, and CDFG with the final version of a Raven Plan. All modifications to the approved Raven Plan shall be made only with approval of the CPM in consultation with USFWS and CDFG.

Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval, a written report identifying which items of the Raven Plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding.

On January 31st of each year following construction the Designated Biologist shall provide a report to the CPM that includes: a summary of the results of raven management and control activities for the year; a discussion of whether raven control and management goals for the year were met; and recommendations for raven management activities for the upcoming year.

#### **Weed Management Plan**

BIO-14 The Project owner shall implement a Weed Management Plan that meets the approval of the CPM. The objective of the Weed Management Plan shall be to prevent the introduction of any new weeds and the spread of existing weeds as a result of Project construction, operation, and decommissioning. The draft Weed Management Plan submitted by the Applicant (TTEC 2009g) shall provide the basis for the final plan, subject to review and revisions from the CPM. The Final Weed Management Plan shall include at a minimum the following information: specific weed management objectives and measures for each target non-native weed species; baseline conditions; a map of the Weed Management Areas; weed risk assessment and measures to prevent the introduction and spread of weeds; monitoring and surveying methods; and reporting requirements.

No less than 10 days prior to start of any Project-related ground disturbance activities, the Project owner shall provide the CPM with the final version of a Weed Management Plan that has been reviewed and approved by Energy Commission staff, USFWS, and CDFG. Modifications to the approved Weed Control Plan shall be made only after consultation with the Energy Commission staff, USFWS, and CDFG.

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
To ensure that weed management does not have unintended adverse effects on special-status species, the final Weed Management Plan shall be revised to be consistent with guidelines for safe use of herbicides in natural areas provided by The Nature Conservancy's The Global Invasive Species Team: <a href="http://www.invasive.org/gist/products/library/herbsafe.pdf">http://www.invasive.org/gist/products/library/herbsafe.pdf</a> .  The final Plan shall include detailed specifications for avoiding herbicide and soil stabilizer drift, and shall include a list of herbicides and soil stabilizers that will be used on the Project with manufacturer's guidance on appropriate use. The Plan shall Indicate where the herbicides will be used, and what techniques will be used to avoid chemical drift or residual toxicity to special-status species and their pollinators, and consistent with the Nature Conservancy guidelines and the criteria under #2, below.  The final plan shall only include weed control measures for target weeds with a demonstrated record of success, based on the best available information from sources such as: The Nature Conservancy's The Global Invasive Species Team, Cooperative Extension, California Invasive Plant Council: <a href="http://www.cdi-ico.org/ip/management/plant">http://www.cdi-ico.org/ip/management/plant</a> profiles/index.php, and the California Department of Food & Agriculture Encycloweedia:		

Co	ndition of Certification	Verification	Responsible Agency			
BIC	BIOLOGICAL RESOURCES (cont.)					
1.	Surveys shall cover all potential nesting habitat in the Project site or within 500 feet of the boundaries of the site (including linear facilities);	the no-disturbance buffer zone around the nest(s) that would be avoided during project construction.				
2.	At least two pre-construction surveys shall be conducted, separated by a minimum 10-day interval. One of the surveys shall be conducted within the 7-day period preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks, an interval during which birds may establish a nesting territory and initiate egg laying and incubation;	No later than January 31 <sup>st</sup> of every year following construction a follow-up report shall be provided to the CPM, CDFG, and USFWS describing the success of the buffer zones in preventing disturbance to nesting activity and a brief description of the outcome of the nesting effort (for example, whether young were successfully fledged from the nest or if the nest failed).				
3.	If active nests are detected during the survey, a buffer zone and monitoring plan shall be developed. The size of the buffer zone shall be developed in consultation with CDFG and shall be determined based on the species specific alert distance and flush initiation distance <sup>2</sup> . Nest locations shall be mapped and submitted, along with a report stating the survey results, to the CPM; and					
and	The Designated Biologist or Biological Monitor shall monitor the nest until he or she determines that nestlings have fledged and dispersed; activities that might, in the opinion of the Designated Biologist, disturb nesting activities, shall be prohibited within the buffer zone until such a determination is made.					
Avi	ian Protection Plan					
fror fror pro to t bird The	The Project owner shall prepare and implement an Avian Protection Plan to monitor the death and injury of birds in collisions with facility features such as transmission lines, reflective mirror-like surfaces and from heat, and bright light in concentrating sunlight. The Project owner shall use the monitoring data to inform and develop an adaptive management ingram that would avoid and minimize Project-related avian impacts. Project-related bird deaths or injuries shall be reported the CPM, CDFG, and USFWS. The CPM, in consultation with CDFG and USFWS, shall determine if the Project-related deaths or injuries warrant implementation of adaptive management measures contained in the Avian Protection Plan. The study design for the Avian Protection Plan shall be approved by the CPM in consultation with CDFG and USFWS, and, are approved, shall be incorporated into the project's BRMIMP and implemented.	No less than 30 days prior to the start of construction-related ground disturbance activities the Project owner shall submit to the CPM, USFWS, and CDFG a final Avian Protection Plan. Modifications to the Avian Protection Plan shall be made only after approval from the CPM.  For one year following the beginning of power plant operation the Designated Biologist shall submit quarterly reports to the CPM, CDFG, and USFWS describing the				
		dates, durations, and results of monitoring. The quarterly reports shall provide a detailed description of any Project-related bird deaths or injuries detected during the monitoring study or at any other time, and describe adaptive management measures implemented to avoid or minimize deaths or injuries. Following the completion of the fourth quarter of monitoring the Designated Biologist shall prepare an Annual Report that summarizes the year's data, analyzes any Project-related bird fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive				

Alert distance refers to the distance between an animal and an activity when the animal becomes visibly alert (as evidenced by cessation of feeding and scrutiny of activity). Flush initiation distance, also called flight distance, refers to the distance between the animal and an activity when the animal takes flight (Taylor and Knight 2003).

Condition of Certification	Verification	Responsib Agency
BIOLOGICAL RESOURCES (cont.)		
	management actions needed.	
	No later than January 31 <sup>st</sup> of every year the Annual Report shall be provided to the CPM, CDFG, and USFWS. Quarterly reporting shall continue until the CPM, in consultation with CDFG and USFWS determine whether more years of monitoring are needed, and whether mitigation and adaptive management measures are necessary. After two years of data collection the project owner or contractor shall prepare a report that describes the study design and monitoring results of the Avian Protection Plan. The report shall be submitted to the CPM, CDFG and USFWS no later than the third year after onset of Project operation.	
American Badger and Desert Kit Fox Impact Avoidance and Minimization Measures		
The Project owner shall submit a rep and CDFG within 30 days of complete species concurrent with the desert tortoise surveys shall be conducted as described below:    The Project owner shall submit a rep and CDFG within 30 days of complete states and CDFG within 30 days of complete		
Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the Project area, including areas within 90 feet of all Project facilities, utility corridors, and access roads. Surveys may be concurrent with desert tortoise surveys. If dens are detected each den shall be classified as inactive, potentially active, or definitely active.	methods, results, impact avoidance and minimization measures implemented, and the results of those measures.	
Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, and especially if high or low ambient temperatures could potentially result in harm to kit fox or badger from burrow exclusion, various passive hazing methods may be used to discourage occupants from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. In the event that passive relocation techniques fail for badgers, the Applicant will contact CDFG to explore other relocation options, which may include trapping.		
Burrowing Owl Impact Avoidance, Minimization, and Compensation Measures		
BIO-18 The Project owner shall implement the following measures to avoid, minimize and offset impacts to burrowing owls:	If pre-construction surveys detect burrowing owls within 500 feet of proposed construction activities, the	
<ol> <li>Pre-Construction Surveys. The Designated Biologist or Biological Monitor shall conduct pre-construction surveys for burrowing owls no more than 30 days prior to initiation of construction activities. Surveys shall be focused exclusively</li> </ol>	Designated Biologist shall provide to the CPM, BLM, CDFG and USFWS documentation indicating that non-	

## Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES (cont.)**

on detecting burrowing owls, and shall be conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. The survey area shall include the Project Disturbance Area and surrounding 500 foot survey buffer.

- Implement Avoidance Measures. If an active burrowing owl burrow is detected within 500 feet from the Project
  Disturbance Area the following avoidance and minimization measures shall be implemented:
  - a. <u>Establish Non-Disturbance Buffer</u>. Fencing shall be installed at a 250-foot radius from the occupied burrow to create a non-disturbance buffer around the burrow. The non-disturbance buffer and fence line may be reduced to 160 feet if all Project-related activities that might disturb burrowing owls would be conducted during the non-breeding season (September 1<sup>st</sup> through January 31<sup>st</sup>). Signs shall be posted in English and Spanish at the fence line indicating no entry or disturbance is permitted within the fenced buffer.
  - b. Monitoring: If construction activities would occur within 500 feet of the occupied burrow during the nesting season (February 1 August 31<sup>st</sup>) the Designated Biologist or Biological Monitor shall monitor to determine if these activities have potential to adversely affect nesting efforts, and shall implement measures to minimize or avoid such disturbance.
- 3. Passive Relocation of Burrowing Owls. If pre-construction surveys indicate the presence of burrowing owls within the Project Disturbance Area (the Project Disturbance Area means all lands disturbed in the construction and operation of the Genesis Project), the Project owner shall prepare and implement a Burrowing Owl Relocation and Mitigation Plan, in addition to the avoidance measures described above. The final Burrowing Owl Relocation and Mitigation Plan shall be approved by the CPM, in consultation with USFWS, BLM and CDFG, and shall:
  - a. Identify and describe suitable relocation sites within 1 mile of the Project Disturbance Area, and describe
    measures to ensure that burrow installation or improvements would not affect sensitive species habitat or existing
    burrowing owl colonies in the relocation area;
  - b. Passive relocation sites shall be in areas of suitable habitat for burrowing owl nesting, and be characterized by minimal human disturbance and access. Relative cover of non-native plants within the proposed relocation sites shall not exceed the relative cover of non-native plants in the adjacent habitats;
  - Provide detailed methods and guidance for passive relocation of burrowing owls occurring within the Project Disturbance Area; and
  - d. Prepare a monitoring and management of the relocated burrowing owl site, and provide a reporting plan. The objective of the plan shall be to manage the relocation area for the benefit of burrowing owls, with the specific goals of:
    - Maintaining the functionality of the burrows for two years.
    - ii. Minimizing the occurrence of weeds (species considered "moderate" or "high" threat to California wildlands as defined by CAL-IPC [2006] and noxious weeds rated "A" or "B" by the California Department of Food and Agriculture and any federal-rated pest plants [CDFA 2009]) at less than 10 percent cover of the shrub and herb layers.
- 4. Acquire Compensatory Mitigation Lands for Burrowing Owls. The following measures for compensatory mitigation shall

disturbance buffer fencing has been installed at least 10 days prior to the start of any construction-related ground disturbance activities. The Project owner shall report monthly to the CPM, CDFG, BLM and USFWS for the duration of construction on the implementation of burrowing owl avoidance and minimization measures. Within 30 days after completion of construction the Project owner shall provide to the CPM, BLM, CDFG and USFWS a written construction termination report identifying how mitigation measures described in the plan have been completed.

If pre-construction surveys detect burrowing owls within the Project Disturbance Area, the Project owner shall notify the CPM, BLM, CDFG, and USFWS no less than 10 days of completing the surveys that a relocation of owls is necessary. The Project owner shall do all of the following if relocation of one or more burrowing owls is required:

- Within 30 days of completion of the burrowing owl pre-construction surveys, submit to the CPM, CDFG and USFWS a Burrowing Owl Relocation and Mitigation Plan.
- b. No less than 90 days prior to acquisition of the burrowing owl compensation lands, the Project owner, or an approved third party, shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS describing the 39-acre parcel intended for purchase. At the same time the Project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, CDFG and USFWS.
- c. Within 90 days of the land or easement purchase, as determined by the date on the title, the Project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM and USFWS, for the compensation lands and associated funds.
- No later than 30 days prior to the start of construction-related ground disturbing activities, the Project owner shall provide written verification

		Responsible
Condition of Certification	Verification	Agency

#### **BIOLOGICAL RESOURCES (cont.)**

apply only if burrowing owls that are detected within the Project Disturbance Area. The Project owner shall acquire, in fee or in easement, 19.5 acres of land for each burrowing owl that is displaced by construction of the Project. Staff anticipates displacement of two owls for a total of 39 acres of compensatory mitigation land. This compensation acreage of 19.5 acres per single bird or pair of nesting owls assumes that there is no evidence that the compensation lands are occupied by burrowing owls. If burrowing owls are observed to occupy the compensation lands, then only 9.75 acres per single bird or pair is required, per CDFG (1995 as cited in the CEC RSA June 2010) guidelines. If the compensation lands are contiguous to currently occupied habitat, then the replacement ratio will be 13.0 acres per pair or single bird. All measures below that are based on a compensation lands total of 39 acres would be revised accordingly. Thirty-nine acres will be used as a placeholder for security.

The Project owner shall provide funding for the enhancement and long-term management of these compensation lands. The acquisition and management of the compensation lands may be delegated by written agreement to CDFG or to a third party, such as a non-governmental organization dedicated to habitat conservation, subject to approval by the CPM, in consultation with CDFG and USFWS prior to land acquisition or management activities. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described in Section 3.i. of Condition of Certification BIO-12.

- a. <u>Criteria for Burrowing Owl Mitigation Lands.</u> The terms and conditions of this acquisition or easement shall be as described in Paragraph 1 of **BIO-12** [Desert Tortoise Compensatory Mitigation], with the additional criteria to include: 1) the 39 acres of mitigation land must provide suitable habitat for burrowing owls, and 2) the acquisition lands must either currently support burrowing owls or be within dispersal distance from areas occupied by burrowing owls (generally approximately 5 miles). The 39 acres of burrowing owl mitigation lands may be included with the desert tortoise mitigation lands ONLY if these two burrowing owl criteria are met. If the 39 acre of burrowing owl mitigation land is separate from the acquisition required for desert tortoise compensation lands, the Project owner shall fulfill the requirements described below in this condition.
- Security. The Security measures described below is based on the assumption that two owls would be impacted by construction of the Project, and would therefore require 39 acres of compensatory mitigation land. If the 39 acres of burrowing owl mitigation land is separate from the acreage required for desert tortoise compensation lands the Project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating ground-disturbing Project activities. Alternatively, financial assurance can be provided by the Project owner to the CPM with copies of the document(s) to CDFG, BLM and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation measure described in this condition. These funds shall be used solely for implementation of the measures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") prior to initiating ground-disturbing Project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with CDFG, BLM and the USFWS to ensure funding. As of the publication of the RSA, this amount is \$44,460 but this amount may change based on land costs or the estimated costs of enhancement and endowment (see subsection C.2.4.2. Desert Tortoise, for a discussion of the assumptions used in calculating the Security, which are based on an estimate of \$2,280 per acre to fund acquisition, enhancement, and long-term management). The final amount due will be determined by the PAR analysis conducted pursuant to BIO-12.

- of Security in accordance with this condition of certification
- e. No later than 18 months after the start of construction-related ground disturbance activities, the Project owner shall provide written verification to the CPM, BLM, CDFG and USFWS that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient.
- f. On January 31st of each year following construction for a period of five years, the Designated Biologist shall provide a report to the CPM, USFWS, BLM and CDFG that describes the results of monitoring and management of the burrowing owl relocation area. The annual report shall provide an assessment of the status of the relocation area with respect to burrow function and weed infestation, and shall include recommendations for actions the following year for maintaining the burrows as functional burrowing owl nesting sites and minimizing the occurrence of weeds.

Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES (cont.)**

#### Special-Status Plant Impact Avoidance, Minimization and Compensation

**BIO-19** This condition contains the following four sections:

- Section A: Special-Status Plant Impact Avoidance and Minimization Measures contains the Best Management
  Practices and other measures designed to avoid accidental impacts to plants occurring outside of the Project
  Disturbance Area and within 100 feet of the Project Disturbance Area during construction, operation, and closure.
- Section B: Conduct Late Season Botanical Surveys describes guidelines for conducting summer-fall 2010 surveys to
  detect special-status plants that would have been missed during the spring 2010 surveys.
- Section C: Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys
  outlines the level of avoidance required for plants detected during the summer-fall surveys, based on the species' rarity
  and status codes.
- Section D: Off-Site Compensatory Mitigation for Special-Status Plants describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/enhancement, or a combination of acquisition and restoration/enhancement.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the plant site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation.

The Project owner shall implement the following measures in Section A, B, C, and D to avoid, minimize, and compensate for impacts to special-status plant species:

#### G.1 Section A: Special-Status Plant Impact Avoidance and Minimization Measures

To protect all special-status plants <sup>3</sup> located outside of the Project Disturbance Area and within 100 feet of the permitted Project Disturbance Area from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

- Designated Botanist. An experienced botanist who meets the qualifications described in Section B-2 below shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work. During operation of the Project, the Designated Biologist shall be responsible for protecting special-status plant occurrences within 100 feet of the Project boundaries.
- Special-Status Plant Impact Avoidance and Minimization Measures. The Project owner shall incorporate all
  measures for protecting special-status plants in close proximity to the site into the BRMIMP (BIO-7). These
  measures shall include the following elements:

The Special-Status Plant Impact Avoidance and Minimization Measures shall be incorporated into the BRMIMP as required under Condition of Certification **BIO-7.** 

Raw GPS data, metadata, and CNDDB field forms shall be submitted to the CPM within two weeks of the completion of each survey. A preliminary summary of results for the late summer/fall botanical surveys shall also be submitted to the CPM and BLM's State Botanist within two weeks following the completion of the surveys. If surveys are split into more than one period, then a summary letter shall be submitted following each survey period. The Final Summer-Fall Botanical Survey Report, GIS shape files and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground-disturbing activities. The Final Report shall include a detailed accounting of the acreage of Project impacts to special-status plant occurrences.

The draft conceptual Special-Status Plant Mitigation Plan shall be submitted to the CPM for review and approval no less than 30 days prior to the start of ground-disturbing activities.

The Project owner shall immediately provide written notification to the CPM, CDFG, USFWS, and BLM if it detects a State- or Federal-Listed Species, or BLM Sensitive Species at any time during its late summer/fall botanical surveys or at any time thereafter through the life of the Project, including conclusion of Project decommissioning.

No less than 30 days prior to the start of grounddisturbing activities the Project owner shall submit grading plans and construction drawings to the CPM

<sup>3</sup> Staff defines special-status plants as described in *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (California Natural Resources Agency, Department of Fish and Game, issued November 24, 2009).

ondition of Certi	ification	Verification	Responsibl Agency
IOLOGICAL RES	SOURCES (cont.)		
b.	Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears: limiting the width of the work area; adjusting the location of staging areas, lay downs, spur roads and poles or towers; driving and crushing vegetation as an alternative to blading temporary roads to preserve the seed bank, and minor adjustments to the alignment of the roads and pipelines within the constraints of the ROW. Design the engineered channel discharge points to maintain the natural surface drainage patterns between the engineered channel and the outlet of the natural washes that flow toward the south and east, downstream of the Project These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP.  Establish Environmentally Sensitive Areas (ESAs). Prior to the start of any ground- or vegetation-disturbing activities, the Designated Botanist shall establish ESAs to protect avoided special-status plants that occur outside of the Project Disturbance Areas and within 100 feet of Project Disturbance Areas. This includes plant occurrences identified during the spring 2009-2010 surveys and the late season 2010 surveys. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall be placed a minimum of 20 feet from the uphill side of the occurrence and 10 feet from the downhill side. Where this is not possible due to construction constraints, other protection measures, such as silt-fencing and sediment controls, may be employed to protect the occurrences. Equipment and vehicle maintenance areas, and wash areas, shall be located 100 feet from the uphill side of any ESAs. ESAs shall be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fencing or sediment controls under penalty of work stoppages and additional	which depict the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition.  If compensatory mitigation is required, no less than 30 days prior to the start of ground-disturbing activities, the Project owner shall submit to the CPM the form of Security adequate to acquire compensatory mitigation lands and/or undertake habitat enhancement or restoration activities, as described in this condition. Actual Security shall be provided 7 days prior to start of ground-disturbing activities.  No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit a formal acquisition proposal and draft Management Plan for the proposed lands to the CPM, with copies to CDFG, USFWS, and BLM, describing the parcels intended for purchase and shall obtain approval from the CPM prior to the acquisition. No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit to the CPM and obtain CPM approval of any agreements to delegate land acquisition to an approved third party, or to manage compensation lands; such agreement shall be executed and implemented within 18 months of the start of ground disturbance.	
d.	Herbicide and Soil Stabilizer Drift Control Measures. Special-status plant occurrences within 100 feet of the Project Disturbance Area shall be protected from herbicide and soil stabilizer drift. The Weed Control Program (BIO-14) shall include measures to avoid chemical drift or residual toxicity to special-status plants consistent with guidelines such as those provided by the Nature Conservancy's <i>The Global Invasive Species Team</i> <sup>4</sup> , the U.S. Environmental Protection Agency, and the Pesticide Action Network Database <sup>5</sup> .	No fewer than 30 days after acquisition of the property the Project owner shall deposit the funds required by Section I e above (long term management and maintenance fee) and provide proof of the deposit to the CPM.  The Project owner or an approved third party shall	
	Network Database .	The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written	

Hillmer, J. & D. Liedtke. 2003. Safe herbicide handling: a guide for land stewards and volunteer stewards. Ohio Chapter, The Nature Conservancy, Dublin, OH. 20 pp. Online: <a href="http://www.invasive.org/gist/products.html">http://www.invasive.org/gist/products.html</a>.

Genesis Solar Energy Project PA/FEIS G-42 August 2010

Pesticide Action Network of North America. Kegley, S.E., Hill, B.R., Orme S., Choi A.H., PAN Pesticide Database, Pesticide Action Network, North America. San Francisco, CA, 2010 <a href="http://www.pesticideinfo.org">http://www.pesticideinfo.org</a>

Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES (cont.)**

- Erosion and Sediment Control Measures. Erosion and sediment control measures shall not
  inadvertently impact special-status plants (e.g., by using invasive or non-native plants in seed mixes,
  introducing pest plants through contaminated seed or straw, etc.). These measures shall be
  incorporated in the Drainage, Erosion, and Sedimentation Control Plan required under SOIL&WATER1.
- f. <u>Avoid Special-Status Plant Occurrences</u>. Areas for spoils, equipment, vehicles, and materials storage areas; parking; equipment and vehicle maintenance areas, and wash areas shall be placed at least 100 feet from any ESAs.
- g. <u>Monitoring and Reporting Requirements</u>. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction and decommissioning activities.

#### G.2 Section B: Conduct Late-Season Botanical Surveys

The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants prior to start of construction or by the end of 2010, as described below:

- 1. <u>Survey Timing.</u> Surveys shall be timed to detect: a) summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October). Fall-blooming perennials that respond to the cooler, later season storms (typically beginning in September or October) shall only be required if blooms and seeds are necessary for identification or the species are summer-deciduous and require leaves for identification. The surveys shall not be timed to coincide with the statistical peak bloom period of the target species but shall instead, if possible, be based on plant phenology and the timing of a significant storm event (e. g., a 10mm or greater rain or multiple storm events of sufficient volume to trigger germination as determined by a qualified botanist.). If possible, surveys shall occur at the appropriate time to capture the characteristics necessary to identify the taxon. Construction is authorized to commence following a 2010 late season survey.
- 2. Surveyor Qualifications and Training. Surveys shall be conducted by a qualified botanist knowledgeable in the complex biology of the local flora, and consistent with CDFG protocols (CDFG 2009). Each surveyor shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit reference sites (where available) and/or review herbarium specimens of all BLM Sensitive plants, CNPS List 1B or 2 (Nature Serve rank S1 and S2) or proposed List 1B or 2 taxa, and any new reported or documented taxa, to obtain a search image. Because the potential for range extensions is unknown, the list of potentially occurring special-status plants shall include all special-status taxa known to occur within the Sonoran Desert region and the eastern portion of the Mojave in California. The list shall also include taxa with bloom seasons that begin in fall and extend into the

verification to the CPM of such completion no later than 18 months after the start of Project grounddisturbing activities. If NFWF or another approved third party is being used for the acquisition, the Project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline. If habitat enhancement is proposed, no later than six months following the start of ground-disturbing activities, the Project owner shall obtain CPM approval of the final Habitat Enhancement/Restoration Plan. prepared in accordance with Section D, and submit to the CPM or a third party approved by the CPM Security adequate for long-term implementation and monitoring of the Habitat Enhancement/Restoration

Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the enhancement project shall be completed within five years of initiation. Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the Project's progress in meeting the enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.

If a Status and Distribution Study is proposed, the study shall commence no later than six months following the start of ground-disturbing activities. The draft study shall be submitted to the CPM and BLM Botanist for review and approval no more than two

		Responsible
Condition of Certification	Verification	Agency

#### **BIOLOGICAL RESOURCES (cont.)**

early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.

- 3. <u>Survey Coverage</u>. The survey coverage or intensity shall be in accordance with BLM Survey Protocols (issued July 2009)<sup>6</sup>, which specify that intuitive controlled surveys shall only be accomplished by botanists familiar with the habitats and species that may reasonably be expected to occur in the project area.
- 4. <u>Documenting Occurrences</u>. If a special-status plant is detected, the full extent of the population onsite shall be recorded using GPS in accordance with BLM survey protocols. Additionally, the extent of the population within one mile of Project boundaries shall be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the population affected by the Project. For populations that are very dense or very large, the population size may be estimated by simple sampling techniques. When populations are very extensive or locally abundant, the surveyor must provide some basis for this assertion and roughly map the extent on a topographic map. All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; the smallest populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the final botanical report shall be prepared to ensure consistency with definition of an occurrence by CNDDB, i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence'. The Project owner shall also submit the raw GPS shape files and metadata, and completed CNDDB forms for each 'occurrence' (as defined by CNDDB).
- 5. Reporting. Raw GPS data, metadata, and CNDDB field forms shall be provided to the CPM within two weeks of the completion of each survey. If surveys are split into two or more periods (e.g., a late summer survey and a fall survey), then a summary letter shall be submitted following each survey period.

The Final Summer-Fall Botanical Survey Report shall be prepared consistent with CDFG guidelines (CDFG 2009), and BLM 2009 guidelines and shall include all of the following components:

- a. the BLM designation, NatureServe Global and State Rank of each species or taxon found (or proposed rank, or CNPS List);
- b. the number or percent of the occurrence that will be directly affected, and indirectly affected by changes in drainage patterns or altered geomorphic processes:
- the habitat or plant community that supports the occurrence and the total acres of that habitat or community type that occurs in the Project Disturbance Area;
- d. an indication of whether the occurrence has any local or regional significance (e.g., if it exhibits any unusual morphology, occurs at the periphery of its range in California, represents a significant range extension or disjunct occurrence, or occurs in an atypical habitat or substrate);

years following the start of ground-disturbing activities. The final study shall be submitted no more than 30 months following the start of ground-disturbing activities.

If a Distribution Study is implemented as contingency mitigation, the study shall be initiated no later than 6 months from the start of construction. The implementation phase of the study shall be completed within two years of the start of construction.

Within 18 months of ground-disturbing activities, the Project owner shall transfer to the CPM or an approved third party the difference between the Security paid and the actual costs of (1) acquiring compensatory mitigation lands, completing initial protection and habitat improvement, and funding the long-term maintenance and management of compensatory mitigation lands; and/or (2) implementing and providing for the long-term protection and monitoring of habitat enhancement or restoration activities.

Implementation of the special-status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, completed CNDDB field forms for each avoided occurrence on-site and within 100 feet of the Project boundary off-site, and description of the remedial action, if warranted and planned for the upcoming

Genesis Solar Energy Project PA/FEIS G-44 August 2010

Bureau of Land Management (BLM), California State Office. Survey Protocols Required for NEPA/ESA Compliance for BLM Special Status Plant Species. Issued July 2009.

Condi	ion of Cert	ification	Verification	Responsible Agency
BIOLO	BIOLOGICAL RESOURCES (cont.)			
	e.	a completed CNDDB field form for every occurrence (occurrences of the same species within one- quarter mile or less of each other combined as one occurrence, consistent with CNDDB methodology), and	year. The completed forms shall include an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population	
	f.	two maps: one that depicts the raw GPS data (as collected in the field) on a topographic base map with Project features; and a second map that follows the CNDDB protocol for occurrence mapping.	and habitat quality trends.	
G.3	Section (	C: Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys		
	be detec	ect owner shall apply the following avoidance standards to late blooming special-status plants that might ted during late summer/fall season surveys. Avoidance and/or the mitigation measures described in D below would reduce impacts to these special-status plant species to less than significant levels.		
	a ( im of co	tigation for CNDDB Rank 1 Plants (Critically Imperiled) - Avoidance Required: If late blooming species with CNDDB rank of 1 are detected within the Project Disturbance Area the Project owner shall prepare and plement a Special-Status Plant Mitigation Plan (Plan). The goal of the Plan shall be to retain at least 75% the local population of the affected species. Compensatory mitigation, as described in Section D of this ndition, and at a mitigation ratio of 3:1, shall be required for the 25% or portion that is not avoided. The an shall include, at a minimum, the following components and definitions:		
	a.	A description of the occurrences of the CNDDB rank 1 species on the Project, ecological characteristics such as micro-habitat requirements, ecosystem processes required for maintenance of the habitat, reproduction and dispersal mechanisms, pollinators, local distribution, a description of the extent of the population off-site, the percentage of the local population affected, and a description of how these occurrences would be impacted by the Project, including direct and indirect effects. The "local population" shall be measured by the number of individuals occurring on the Project Site and within the immediate watershed of the Project for wash dependent-species or species of unknown dispersal mechanism, or within the local sand transport corridor for wind dispersed species. Occurrences shall be considered impacted if they are within the Project footprint, and if they would be affected by Project-related hydrologic changes or changes to the local sand transport system.		
	b.	A description of the avoidance and minimization measures that would achieve complete avoidance of occurrences on the Project linears and construction laydown areas, unless such avoidance would cause disturbance to areas not previously surveyed for biological resources (GSEP 2009a, TTEC 2010m) or would create greater environmental impacts in other resource areas (e.g. Cultural Resource Sites) or other restrictions (e.g., FAA or other restrictions for placement of transmission poles).		
	C.	A description of the measures that would be implemented to avoid or minimize impacts to occurrences on the solar facility. Avoidance is generally considered not feasible if the species is located within the Permanent Project Disturbance Area (bounded by the permanent tortoise exclusion fence and the drainage channels).		
	d.	If avoidance on the linears, construction laydown areas, and solar facility combined protect less than 75% of the local population of the affected species, the project owner shall implement offsite mitigation that demonstrates that the impacts will not cause a loss of viability for that species. Implementation of the compensatory offsite mitigation must meet the performance standards described in section D of this		

Condition of 0	Certi	ification	Verification	Responsible Agency
BIOLOGICAL	RES	SOURCES (cont.)		
		Condition, and may include land acquisition or implementation of a restoration/enhancement program for the species.		
	e.	"Avoidance" shall include protection of the ecosystem processes essential for maintenance of the protected plant occurrence. For all but one of the late blooming plant species with potential to occur, the plant species are annuals that depend on a viable seed bank to maintain population health and persistence. The primary goal of avoidance for these annual species will be protection of the soil integrity and the seed bank that is closely associated with undisturbed soils. Any impacts to the soil structure or surface features will be considered an impact, but measures like temporary mowing or brush removal that does not disturb the soil will not be considered impacts to the population. Isolated 'islands' of protected plants disconnected by the Project from natural fluvial, aeolian (wind), or other processes essential for maintenance of the species, shall not be considered to be protected and shall not be credited as contributing to the 75% avoidance requirement because such isolated populations are not sustainable.		
2.	rar Sp oc dis cre res pro pla	tigation for CNDDB Rank 2 Plants (Imperiled) —Avoidance on Linears Required: If species with a CNDDB rick of 2 are detected within the Project Disturbance Area, the Project owner shall prepare and implement a decial-Status Plant Mitigation Plan (Plan) that describes measures to achieve complete avoidance of currences on the Project linears and construction laydown areas, unless such avoidance would cause sturbance to areas not previously surveyed for biological resources (GSEP 2009a, TTEC 2010m) or would eate greater environmental impacts in other resource areas (e.g. Cultural Resource Sites) or other strictions (e.g., FAA or other restrictions for placement of transmission poles). The Project owner shall bridge compensatory mitigation, at a ratio of 2:1, as described below in Section D for impacts to Rank 2 ants that could not be avoided. The content of the Plan and definitions shall be as described above in bsection C.1.		
3.	Sig av	tigation for CNDDB Rank 3 Plants – No On-Site Avoidance Required Unless Local or Regional gnificance: If species with a CNDDB rank of 3 are detected within the Project Disturbance Area, no onsite oidance or compensatory mitigation shall be required unless the occurrence has local or regional gnificance, in which case the plant occurrence shall be treated as a CNDDB rank 2 plant species. A plant currence would be considered to have local or regional significance if:		
	a.	It occurs at the outermost periphery of its range in California;		
	b.	It occurs in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;		
	C.	It exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or sub-species.		
4.	fec	e-Construction Notification for State- or Federal-Listed Species, or BLM Sensitive Species. If a state or deral-listed species or BLM Sensitive species is detected, the Project owner shall immediately notify the DFG, USFWS, BLM, and the CPM.		
5.	<u>Pro</u>	eservation of the Germplasm of Affected Special-Status Plants. For all significant impacts to special-status ants, regardless of whether compensatory mitigation is required, mitigation shall include seed collection		

Condi	ion of Certification	Verification	Responsible Agency
BIOLO	GICAL RESOURCES (cont.)		
	from the affected special-status plants on-site prior to construction to conserve the germplasm and provide a seed source for restoration efforts. The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden. The costs associated with the long-term storage of the seed shall be the responsibility of the Project owner. Any efforts to propagate and reintroduce special-status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plan approved by the CPM.		
G.4	Section D: Off-Site Compensatory Mitigation for Special-Status Plants		
	Where compensatory mitigation is required under the terms of Section C, above, the Project owner shall mitigate Project impacts to special-status plant occurrences with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, or restoration/enhancement of populations of the target species, and shall meet the performance standards for mitigation described below. In the event that no opportunities for acquisition or restoration/enhancement exist, the Project owner can fund a species distribution study designed to promote the future preservation, protection or recovery of the species. Compensatory mitigation shall be at a ratio of 3:1 for Rank 1 plants, with three acres of habitat acquired or restored/enhanced for every acre of habitat occupied by the special status plant that will be disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ½ acre than the compensatory mitigation will be ¾ of an acre). The mitigation ratio for Rank 2 plants shall be 2:1. So, for the example above, the mitigation ratio would be one-half acre for the Rank 2 plants.		
	The Project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) report, and other transactional costs related to the use of compensatory mitigation.		
	The Project owner shall comply with other related requirements in this condition:		
	I. Compensatory Mitigation by Acquisition: The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands include all of the following:		
	Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:		
	a. Occupied Habitat, No Habitat Threats: The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction).		
	b. Occupied Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may		

Condition of	ertification	Verification	Responsible Agency
BIOLOGICAL	ESOURCES (cont.)		
	also be acquired as long as the population could be reasonably expected to recover with habitat restoration efforts (e.g., OHV or grazing exclusion, or removal of invasive non-native plants) and is accompanied by a Habitat Enhancement/Restoration Plan as described in Section D.II, below.		
	c. <u>Unoccupied but Adjacent</u> . The Project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat. This acquisition may include habitat restoration efforts where appropriate, particularly when these restoration efforts wibenefit adjacent habitat that is occupied by the target species.	1	
2.	Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above, and must be approved by the CPM.		
3.	Management Plan. The Project owner or approved third party shall prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan shall be to support and enhance the long-term viability of the target special-status plant occurrences. The Management Plan shall be submitted for review and approval to the CPM.		
4.	Integrating Special-Status Plant Mitigation with Other Mitigation lands. If all or any portion of the acquired Desert Tortoise, Waters of the State, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation.	t	
5.	Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, has approved the proposed compensation lands:		
	a. <a href="Preliminary Report">Preliminary Report</a> . The Project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.		
	b. <u>Title/Conveyance.</u> The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in		

Condition of Certi	fication	Verification	Responsible Agency
BIOLOGICAL RES	SOURCES (cont.)		
	favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.		
C.	Initial Protection and Habitat Improvement. The Project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be \$330 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at the ratio of 3:1 for Rank 1 plants and 2:1 for Rank 2 plants, but actual costs will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.		
d.	<u>Property Analysis Record</u> . Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.		
e.	Long-term Maintenance and Management Funding. The Project owner shall deposit in NFWF's REAT Account a non-wasting capital long-term maintenance and management fee in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands.		
	The CPM, in consultation with CDFG, may designate another non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity. If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.		
f.	Interest, Principal, and Pooling of Funds. The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund (endowment) holder/manager to ensure the following requirements are met:		
	<ol> <li>Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead,</li> </ol>		

Condition of Certif	cation	Verification	Responsible Agency
BIOLOGICAL RES	DURCES (cont.)		
	biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands.		
	ii. <u>Withdrawal of Principal</u> . The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM or by the approved third- party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.		
	iii. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for special-status plants. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM.		
g.	Other Expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.		
h.	Mitigation Security. The Project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The amount of the Security shall be \$2,280 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a ratio of 3:1 for Rank 1 plants and 2:1 for Rank 2 plants, for every acre of habitat supporting the target special-status plant species which is significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the Project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.		
i.	The Project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action		

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the Project owner, the Project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, and the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the Applicant, the remaining balance shall be returned to the Project owner.		
The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the start of ground disturbance.		
II. Compensatory Mitigation by Habitat Enhancement/Restoration: As an alternative or adjunct to land acquisition for compensatory mitigation the Project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio for Rank 1 plants and 2:1 for Rank 2 plants, with improvements applied to three acres, or two acres, respectively, of habitat for every acre special-status plant habitat directly or indirectly_disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the improvements would be applied to an area equal to ¾ of an acre at a 3:1 ratio, or one-half acre at a 2:1 ratio). Examples of suitable enhancement projects include but are not limited to the following: i) control of invasive non-native plants that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows, removing obstructions to the wind sand transport corridor above an occurrence, or increasing groundwater availability for dependent species.		
If the Project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the following performance standards: The proposed enhancement project shall achieve rescue of an off-site occurrence that is currently assessed, based on the NatureServe threat ranking system with one of the following threat ranks: a) long-term decline >30%; b) an immediate threat that affects >30% of the population, or c) has an overall threat impact that is High to Very High. "Rescue" would be considered successful if it achieves an		

Master, L., D. Faber-Langendoen, R. Bittman, G. A., Hammerson, B. Heidel, J. Nichols, L. Ramsay, and A. Tomaino. 2009. *NatureServe Conservation Status Assessments: Factors for Assessing Extinction Risk*. NatureServe, Arlington, VA. Online: http://www.natureserve.org/publications/ConsStatusAssess\_StatusFactors.pdf, "Threats". See also: Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity. Version 1. NatureServe, Arlington, Virginia. Online: http://www.natureserve.org/publications/pubs/invasiveSpecies.pdf

Condition of	Certification	Verification	Responsible Agency
BIOLOGICAL	RESOURCES (cont.)		
	provement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to ght or low (from "High" to "Very High").		
En imp est pla is c cos enl	the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat hancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for blementation and monitoring of the Plan. The amount of the Security shall be \$2,280 per acre, using the imated cost per acre for Desert Tortoise mitigation as a best available proxy, at the ratio of 3:1 for Rank 1 nts and 2:1 for Rank 2 plants, for every acre of habitat supporting the target special-status plant species which directly or indirectly impacted by the project. The amount of the security may be adjusted based on the actual sts of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the nancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:		
1.	Goals and Objectives. Define the goals of the restoration or enhancement project and a measurable course of action developed to achieve those goals. The objective of the proposed habitat enhancement plan shall include restoration of a target special-status plant occurrence that is currently threatened with a long-term decline. The proposed enhancement plan shall achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").		
2.	<u>Historical Conditions</u> . Provide a description of the pre-impact or historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.		
3.	<u>Site Characteristics</u> . Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species.		
4.	<u>Ecological Factors</u> . Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.		
5.	<u>Methods</u> . Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the enhancement must be completed within five years.		
6.	<u>Budget</u> . Provide a detailed budget and time-line, and develop clear, measurable, objective-driven annual success criteria.		
7.	Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall include a minimum of five years of quarterly monitoring, and then annual monitoring for the remainder of the enhancement project, and until the performance standards for rescue of a threatened occurrence are met. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the enhancement project success criteria, detailed description of remedial actions taken or proposed, and contact information for the responsible parties.		
8.	Reporting Program. The Plan shall ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.		

Condition of	Certification	Verification	Responsible Agency
BIOLOGICAL	RESOURCES (cont.)		
9.	Contingency Plan. Describe the contingency plan for failure to meet annual goals.		
10.	<u>Long-term Protection</u> . Include proof of long-term protection for the restoration site. For private lands this would include conservations easements or other deed restrictions; projects on public lands must be contained in a Desert Wildlife Management Area, Wildlife Habitat Management Area, or other land use protections that will protect the mitigation site and target species.		
Aff acc spe ecc sta and Cal The and futu del	Compensatory Mitigation by Conducting or Contributing to a Distribution and Status Study for the ected Species: As determined by the CPM, in the event there are no opportunities for mitigation through quisition or restoration/enhancement, a Study of Distribution and Status for the affected special-status plant ecies may be implemented or funded. Information on the distribution, status or health of known occurrences, ological requirements, and ownership and management opportunities is very limited for many of the special-tus plant species that occur on the Project or have potential to occur on the project, especially the late summer difall blooming species. Some of these late blooming species are only known from a few viable occurrences in lifornia, and historic occurrences that have not been re-located or surveyed since they were first documented. The objectives of this study would be to better understand the full distribution of the affected species, the degree dimmediacy of threats to occurrences, and ownership and management opportunities, with the primary goal of the preservation, protection, or recovery of the affected species within California. Additionally the study should ineate other areas in the region that should be avoided or protected due to rare plant presence. To further sure protection, study data shall be published in the state's rare plant database.		
At a	a minimum, the study shall include the following:		
1.	Occurrence and Life History Review. The Study shall include an evaluation of all documented, historical and reported localities for the affected species, and a review of current information on the species life history. This would include a review of the CNDDB database, records from regional and national herbaria, literature review, consultation with U.C. Riverside, San Diego Natural History Museum, and other educational institutions or natural heritage organizations in California, Arizona, and Nevada, etc.), other biotechnical survey reports from the region, and information from regional botanical experts.		
2.	Conduct Site Visits to Documented and Reported Localities. Documented and reported occurrences would be evaluated in the field during the appropriate time of the year for each late blooming species. If located, these occurrences would be evaluated for population size (area and quantity), population trend, ecological characteristics, soils, habitat quality, potential threats, degree and immediacy of threats, ownership and management opportunities. GPS location data would also be collected during these site visits.		
3.	<u>Survey Surrounding Areas.</u> Areas surrounding the occurrences that contain habitat suitable to support the affected species shall be surveyed to determine the full extent of its range and distribution. If additional populations are found, collect data (GPS and assessment) on these additional populations consistent with III.2 above.		
4.	<u>Prepare a Status and Distribution Study Report.</u> A report shall be prepared that contains the results of the surveys and assessment. The report shall contain the following components: a) Range and Distribution (including maps and GPS data); b) Abundance and Population Trends; c) Life History; d) Habitat Necessary for Survival; d) Factors Affecting Ability to Survive and Reproduce; e) Degree and Immediacy of Threat; f)		

Conditio	n of Certification	Verification	Responsible Agency
BIOLOG	CAL RESOURCES (cont.)		
	Ownership and Management Opportunities for Protection or Recovery; g) Sources of Information, and g) Conclusions. The conclusions shall contain an explanation of whether the species' survival is threatened by any of the following factors: i) present or threatened modification or destruction of its habitat; ii) competition; iii) disease; iv) or other natural occurrences (such as climate change) or human-related activities. This valuable information will provide a better understanding of the ecological factors driving the distribution of these species, and will identify opportunities for mitigation and management opportunities for recovery. All data from this study will be submitted for incorporation into the CNDDB system and the study report will be made available to resource agencies, and conservation groups, and other interested parties.		
	The cost to implement or fund the study shall be no greater than the cost for acquisition, enhancement, and long-term management of compensatory mitigation lands based on the specifications and standards for acquisition or restoration/enhancement described above under D.I and D.II.		
Sand Du	nes/Mojave Fringe-Toed Lizard Mitigation		1
other Moshall prov The 136- are chan- requirem the Natio	The Project owner shall mitigate for direct and indirect impacts to stabilized and partially stabilized sand dunes and ave fringe-toed lizard habitat by acquisition of 136 acres of Mojave fringe-toed lizard habitat. The Project owner ride funding for the acquisition, initial habitat improvements and long-term management of the compensation lands. acre acquisition requirement, and associated funding requirements based on that acreage will be adjusted if there ges in the final footprint of the Project. In lieu of acquiring lands itself, the Project owner may satisfy the ents of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with hal Fish and Wildlife Foundation (NFWF), as described in Section 3.i. of Condition of Certification BIO-12. Condition ation BIO-29 may provide the Project owner with another option for satisfying some or all of the requirements in this	No later than 30 days prior to beginning construction-related ground-disturbing activities, the Project owner shall provide written verification of Security in accordance with this condition of certification. The Project owner, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of the start of construction-related ground-disturbing activities.	
following		The Project owner, or an approved third party, shall provide the CPM, CDFG and USFWS with a management plan for the compensation lands and	
1. <u>Cri</u> a.	eria for Compensation Lands: The compensation lands selected for acquisition shall:  Provide suitable habitat for Mojave fringe-toed lizards that is equal to or better than that found in the Project disturbance area, and may include stabilized and partially stabilized desert dunes or sand drifts over playas or Sonoran creosote bush scrub;	associated funds within 180 days of the land or easement purchase, as determined by the date on the title. The CPM shall review and approve the management plan, in consultation with CDFG and the	
b.	Be within the Chuckwalla Valley with potential to contribute to Mojave fringe-toed lizard habitat connectivity and build linkages between known populations of Mojave fringe-toed lizards and preserve lands with suitable habitat;	USFWS.  No less than 90 days prior to acquisition of the	
C.	Be connected to lands that are either currently occupied or have high potential to be occupied by Mojave fringe- toed lizard based on patch size and habitat quality;	property, the Project owner shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS describing the parcels intended for purchase. At the	
d.	Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;	same time the project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, in consultation with BLM, CDFG and USFWS.	

Con	ditior	of Certification	Verification	Responsible Agency
вю	LOGI	CAL RESOURCES (cont.)		
	e.	Not have a history of intensive recreational use or other disturbance that might make habitat recovery and restoration infeasible;	Within 90 days after completion of Project construction, the Project owner shall provide to the CPM and CDFG	
	f.	Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;	an analysis with the final accounting of the amount of Mojave fringe-toed lizard habitat disturbed during Project construction.	
	g.	Not contain hazardous wastes;	The Project owner shall provide written verification to	
	h.	Not be subject to property constraints (i.e. mineral leases, cultural resources); and	the CPM, USFWS and CDFG that the compensation	
	i.	Be on land for which long-term management is feasible.	lands or conservation easements have been acquired and recorded in favor of the approved recipient no later	
2.	gual fring mea lette shal publ of el	urity for Implementation of Mitigation: The Project owner shall provide financial assurances to the CPM to rantee that an adequate level of funding is available to implement the acquisitions and enhancement of Mojave le-toed lizard habitat as described in this condition. These funds shall be used solely for implementation of the issures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable or of credit, a pledged savings account or Security prior to initiating ground-disturbing project activities. The Security I be approved by the CPM, in consultation with CDFG and the USFWS, to ensure sufficient funding. As of the lication of the RSA, this amount is \$433,200. This amount may change based on land costs or the estimated costs inhancement and endowment (see subsection C.2.4.2, Desert Tortoise, for a discussion of the assumptions used in ulating the Security, which are based on an estimate of \$1,450 per acre to fund acquisition, enhancement and reterm management).	than 18 months after the initiation of construction related ground-disturbance activities.	
3.	Plar com for N	<u>paration of Management Plan</u> : The Project owner shall submit to the CPM, CDFG and USFWS a draft Management of that that reflects site-specific enhancement measures for the Mojave fringe-toed lizard habitat on the acquired pensation lands. The objective of the Management Plan shall be to enhance the value of the compensation lands Mojave fringe-toed lizards, and may include enhancement actions such as weed control, fencing to exclude stock, erosion control, or protection of sand sources or sand transport corridors.		
Eva	porati	on Pond Netting and Monitoring		
exclinch mon the paddi evap	ude bi es ma itored bonds tion to boratio  Monti monti deter and to	The Project owner shall cover the evaporation ponds prior to any discharge with 1.5-inch mesh netting designed to rds and other wildlife from drinking or landing on the water of the ponds. Netting with mesh sizes other than 1.5-by be installed if approved by the CPM in consultation with CDFG and USFWS. The netted ponds shall be regularly to verify that the netting remains intact, is fulfilling its function in excluding birds and other wildlife from and does not pose an entanglement threat to birds and other wildlife. The ponds shall include a visual deterrent in the netting, and the pond shall be designed such that the netting shall never contact the water. Monitoring of the ponds shall include the following:  Interval Designated Biologist or Biological Monitor shall regularly survey the ponds at least once per in starting with the first month of operation of the evaporation ponds. The purpose of the surveys shall be to mine if the netted ponds are effective in excluding birds, if the nets pose an entrapment hazard to birds and wildlife, to assess the structural integrity of the nets. The monthly survey shall be conducted in one day for a minimum of ours following sunrise (i.e., dawn), a minimum of one hour mid-day (i.e., 1100 to 1300), and a minimum of two	No less than 30 days prior to operation of the evaporation ponds the project owner shall provide to the CPM as-built drawings and photographs of the ponds indicating that the bird exclusion netting has been installed. For the first year of operation the Designated Biologist shall submit quarterly reports to the CPM, CDFG, and USFWS describing the dates, durations and results of site visits conducted at the evaporation ponds. Thereafter the Designated Biologist shall submit annual monitoring reports with this information. The quarterly and annual reports shall fully describe any bird or wildlife death or entanglements detected during the site visits or at any	

Co	Condition of Certification Verification		
ВІ	OLOGICAL RESOURCES (cont.)		
	hours preceding sunset (i.e., dusk) in order to provide an accurate assessment of bird and wildlife use of the ponds during all seasons. Surveyors shall be experienced with bird identification and survey techniques. Operations staff at the Project site shall also report finding any dead birds or other wildlife at the evaporation ponds to the Designated Biologist within one day of the detection of the carcass. The Designated Biologists shall report any bird or other wildlife deaths or entanglements within two days of the discovery to the CPM, CDFG, and USFWS.	other time, and shall describe actions taken to remedy these problems. The annual report shall be submitted to the CPM, CDFG, and USFWS no later than January 31st of every year for the life of the project.	
2.	<u>Dead or Entangled Birds</u> . If dead or entangled birds are detected, the Designated Biologist shall take immediate action to correct the source of mortality or entanglement. The Designated Biologist shall make immediate efforts to contact and consult the CPM, CDFG, and USFWS by phone and electronic communications prior to taking remedial action upon detection of the problem, but the inability to reach these parties shall not delay taking action that would, in the judgment of the Designated Biologist, prevent further mortality of birds or other wildlife at the evaporation ponds.		
3.	Quarterly Monitoring. If after 12 consecutive monthly site visits no bird or wildlife deaths or entanglements are detected at the evaporation ponds by or reported to the Designated Biologist, monitoring, as described in paragraph 1, can be conducted on a quarterly basis.		
4.	Biannual Monitoring. If after 12 consecutive quarterly site visits no bird or wildlife deaths or entanglements are detected by or reported to the Designated Biologist and with approval from the CPM, USFWS and CDFG, future surveys may be reduced to two surveys per years, during the spring nesting season and during fall migration. If approved by the CPM, USFWS and CDFG, monitoring outside the nesting season may be conducted by the Environmental Compliance Manager.		
5.	Modification of Monitoring Program. CDFG or USFWS may submit a request for modifications to the evaporation pond monitoring program based on information acquired during monitoring, and may also suggest adaptive management measures to remedy any problems that are detected during monitoring or modifications if bird impacts are not observed. Modifications to the evaporation pond monitoring described above and implementation of adaptive management measures shall be made only after approval from the CPM, in consultation with USFWS and CDFG.		
Mi	tigation For Impacts to State Waters		
im	O-22 The Project owner shall implement the following measures to avoid, minimize and mitigate for direct and indirect pacts to waters of the state and to satisfy requirements of California Fish and Game Code sections 1600 and 1607.  Acquire Off-Site State Waters: The Project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes at least 132 acres of state jurisdictional waters, or the area of state waters directly or indirectly impacted by the final Project footprint. The Project footprint means all lands disturbed by construction and operation of the Genesis Project, including all Project linears. The parcel or parcels comprising the 132 acres of ephemeral washes shall include at least 48 acres of microphyll woodland. If the Reduced Acreage Alternative were constructed the mitigation requirements for impacts to state waters would be a minimum of 109 acres that included at least 48 acres of microphyll woodland. The terms and conditions of this acquisition or easement shall be as described in Condition of Certification BIO-12, #2 and #3. Mitigation for impacts to state waters shall occur within the Chuckwalla-Ford Dry Lake or surrounding watersheds, as close to the Project site as possible. The 132-acre acquisition of state waters may be integrated with the desert tortoise mitigation acquisition if the criteria described in this condition are met.	No less than 30 days prior to the start of construction-related ground disturbance activities potentially affecting waters of the state, the Project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above best management practices shall be implemented. The Project owner shall also provide a discussion of work in waters of the state in Compliance Reports for the duration of the Project.  No less than 30 days prior to beginning construction-related ground-disturbing activities the Project owner shall provide written verification of Security in accordance with this condition of certification. The	

Condition of Certification Responsible Agency

#### **BIOLOGICAL RESOURCES (cont.)**

- 2. Security for Implementation of Mitigation: The Project owner shall provide financial assurances to the CPM and CDFG to guarantee that an adequate level of funding is available to implement the acquisitions and enhancement of state waters as described in this condition. These funds shall be used solely for implementation of the measures associated with the project. Financial assurance can be provided to the CPM and CDFG in the form of an irrevocable letter of credit, a pledged savings account or Security prior to initiating construction-related ground disturbing activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with CDFG and the USFWS, to ensure sufficient funding. As of the publication of the RSA, this amount is \$300,960. These amounts may change based on changes in land costs or the estimated costs of enhancement and endowment (see subsection C.2.4.2, Desert Tortoise, for a discussion of the assumptions used in calculating the Security, which are based on an estimate of \$2,280 per acre to fund acquisition, enhancement and long-term management). The final amount due shall be determined by an updated appraisals and the PAR analysis conducted as described in BIO-12.
- 3. <u>Title/Conveyance.</u> The Project owner shall transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM in consultation with CDFG. Transfer of either fee title or an approved conservation easement will usually be sufficient, but some situations, e.g., the donation of lands burdened by a conservation easement to BLM, will require that both types of transfers be completed. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM under terms approved by the CPM in consultation with CDFG. If an approved non-profit organization holds title to the compensation lands, a conservation easement shall be recorded in favor of CDFG in a form approved by the CPM. If an approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary.
- 4. <u>Preparation of Management Plan</u>: The Project owner shall submit to the CPM and CDFG a draft Management Plan that reflects site-specific enhancement measures for the drainages on the acquired compensation lands. The objective of the Management Plan shall be to enhance the wildlife value of the drainages, and may include enhancement actions such as weed control, fencing to exclude livestock, or erosion control.
- 5. Stop Work Provisions. The Project owner shall provide a copy of this condition (Condition of Certification BIO-22) from the Energy Commission Final Decision to all contractors, subcontractors, and other on-site personnel. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any CDFG personnel upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the Project owner and the CPM if the CPM, in consultation with CDFG, determines that the Project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:
  - a. The information provided by the Applicant regarding impacts to waters of the state is incomplete or inaccurate:
  - b. New information becomes available that was not known to staff in preparing the terms and conditions; or
  - The Project or Project activities as described in the Staff Assessment have changed.
- 6. Notification: The project owner shall notify the CPM and CDFG in writing before conducting Project activities in jurisdictional areas. The Project owner shall notify the CPM and CDFG of any change of conditions to the Project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of a proposed Project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed Project. The notifying report shall be provided to the CPM and CDFG no later than seven days after the change of conditions is

Project owner, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of the start of construction-related ground-disturbing activities.

The Project owner shall notify the CPM and CDFG, in writing, at least five days prior to initiation of construction-related ground-disturbing activities in jurisdictional state waters and at least five days prior to completion of Project activities in jurisdictional areas. The Project owner shall notify the CPM and CDFG of any change of conditions to the Project, impacts to state waters, or the mitigation efforts. The notifying report shall be provided to the CPM and CDFG no later than seven days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a Project: the biological and physical characteristics of a Project area: or the laws or regulations pertinent to the Project as defined below. A copy of the notifying Change of Conditions report shall be included in the annual reports or until it is deemed unnecessary by the CPM. in consultation with CDFG.

The Project owner, or an approved third party, shall provide the CPM, CDFG and USFWS with a draft management plan for the compensation lands and associated funds within 180 days of the land or easement purchase, as determined by the date on the title. The CPM shall review and approve the management plan, in consultation with CDFG.

Within 90 days after completion of Project construction, the Project owner shall provide to the CPM and CDFG an analysis with the final accounting of the amount of jurisdictional state waters disturbed during Project construction.

The Project owner shall provide written verification to the CPM, USFWS and CDFG that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient no later than 18 months after the start of construction-related

onditi	on of Certification	Verification	Responsible Agency
IOLO	SICAL RESOURCES (cont.)		
the bel	d. As used here, change of condition refers to the process, procedures, and methods of operation of a project; ogical and physical characteristics of a project area; or the laws or regulations pertinent to the project as defined a copy of the notifying change of conditions report shall be included in the annual reports. A change of conditions and as follows:  ground-disturbing activities.  On January 31st of each year following construction the Designated Biologist shall provide a report to the CPM, BLM, USFWS and CDFG that describes the		
a.	<u>Biological Conditions</u> : a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the Project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the Project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.	results of monitoring and management of the acquisition lands. The annual report shall describe actions taken to implement the management plan (for example, fencing, erosion control, weed control) during the year and recommendations for enhancement actions that should be implemented the following year.	
b.	Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or substantial changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.		
C.	<u>Legal Conditions</u> : a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.		
	st Management Practices: The Project owner shall also comply with the following conditions to protect drainages near approved impact areas as defined in the approved construction documents:		
a.	The Project owner shall minimize road building, construction activities and vegetation clearing within ephemeral drainages to the extent feasible.		
b.	The Project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter ephemeral drainages or be placed in locations that may be subjected to high storm flows.		
C.	The Project owner shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the Project owner to ensure compliance.		
d.	Spoil sites shall be located at least 30 feet from the boundaries and drainages or in locations that may be subjected to high storm flows, where spoils might be washed back into drainages.		
e.	Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from Project-related activities, shall be prevented from contaminating the soil and/or entering waters of the state. These materials, placed within or where they may enter a drainage, shall be removed immediately.		
f.	No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into waters of the state.		
g.	When operations are completed, any excess materials or debris shall be removed from the work area.		

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
h. No equipment maintenance shall occur within 150 feet of any ephemeral drainage where petroleum products or other pollutants from the equipment may enter these areas under any flow.		
Decommissioning and Closure Plan		
BIO-23 Upon Project closure the Project owner shall implement a final Decommissioning and Closure Plan for the Project site. The Decommissioning and Closure Plan shall include a cost estimate for implementing the proposed decommissioning and reclamation activities, and shall be consistent with the guidelines in BLM's 43 CFR 3809.550 et seq., subject to review and revisions from the CPM in consultation with BLM, USFWS, and CDFG. The Project owner shall submit a draft Decommissioning and Closure Plan for review to the CPM, BLM, USFWS and CDFG. The Project owner shall finalize the plan only after approval from the CPM, in consultation with BLM, USFWS, and CDFG. Throughout the life of the Project the Project owner plan shall regularly submit the plan to the CPM for review and updating, if warranted, as described in Verification below. Modifications to the final Decommissioning and Closure Plan shall be made only after approval from the CPM, in consultation with BLM, USFWS, and CDFG.	No less than 30 days prior to initiating construction-related ground disturbance activities, the Project owner shall provide to BLM and the CPM a draft Decommissioning and Closure Plan. The plan shall be finalized prior to the start of commercial operation and reviewed every five years thereafter and submitted to the CPM for approval, in consultation with BLM. Modifications to the approved Decommissioning and Closure Plan shall be made only after approval from the CPM, in consultation with BLM, USFWS, and CDFG.  No less than 10 days prior to initiating construction-related ground disturbance activities the Project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding would be available to implement measures described in the Decommissioning and Closure Plan, consistent with the provisions set forth in 43 C.F.R. sections 2805.12 and 3809.500599.	
Revegetation of Temporarily Disturbed Areas		
BIO-24 The Project owner shall prepare and implement a Revegetation Plan to restore all areas subject to temporary disturbance. The final Revegetation Plan shall be based on the draft Revegetation Plan submitted by the Applicant (TTEC 2010i) and shall include all revisions deemed necessary by the CPM in consultation with BLM. The objectives of the Revegetation Plan shall be to stabilize disturbed soils, minimize erosion and sedimentation impacts to soil and water resources, prevent colonization by noxious weeds and other non-native plants, salvage native plantings and seed from Project Disturbance Areas, and to achieve restoration of disturbed areas to functioning, established early-successional native plant communities.	No less than 30 days prior to construction-related ground-disturbance activities the Project owner shall submit to the CPM a final agency-approved Revegetation Plan that has been reviewed and approved by the CPM. All modifications to the Revegetation Plan shall be made only after approval from the CPM.	
Target performance standards at the end of the monitoring period shall be as follows:  a. total absolute cover of all plants shall equal at least 30 percent;  b. survivorship of salvaged and transplanted cacti and other native plantings shall equal 30% percent;	Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval a report identifying which items of the Revegetation Plan have been completed, a summary of all modifications to revegetation measures made	

CONDITIONS OF CERTIFICATION			
Coi	ndition of Certification	Verification	Responsible Agency
BIC	DLOGICAL RESOURCES (cont.)		
C.	at least 90 percent (relative cover) of the perennial species observed within the temporarily disturbed areas shall be locally native species that naturally occur in the adjacent desert scrub or dune habitats;	during the Project's construction phase, and which items are still outstanding.	
d. e.	relative cover of perennial plant species shall equal at least 60 percent of the total vegetative cover; and Relative cover of non-native plants within the temporarily disturbed areas shall not exceed the relative cover of non-native plants in the adjacent habitats.	The Designated Biologist shall provide reports to the CPM according to the reporting schedule in the Revegetation Plan that that includes: a summary of revegetation activities for the year, a discussion of whether revegetation performance standards for the year were met; and recommendations for revegetation remedial action, if warranted, planned for the upcoming year. Reports shall be submitted on January 31st following the relevant reporting year.	
weg mor con The stat	<b>D-25</b> If the Project uses wet cooling, the Applicant shall prepare and implement a Draft Groundwater-Dependent getation Monitoring Plan (Vegetation Monitoring Plan). The objectives of the Vegetation Monitoring Plan shall be to nitor the Project effects of groundwater pumping on groundwater-dependent vegetation (phreatophytes) and, in junction with <b>BIO-26</b> , to ensure that the Project has a less than significant effect on groundwater-dependent ecosystems. A Vegetation Monitoring Plan shall be consistent with guidance for designing vegetation monitoring plans and conducting istical analysis in <i>Measuring and Monitoring Plant Populations</i> (Elzinga et al. 1998). Monitoring shall focus on areas	No more than 60 days following the docketing of the Energy Commission Final Decision, the Project owner shall submit to the CPM a final Vegetation Monitoring Plan that has been reviewed and approved by the CPM. All modifications to the Vegetation Monitoring Plan shall be made only after approval from the CPM.	
and	taining obligate or facultative phreatophytes (mesquite, ironwood, bush seep-weed, palo verde, cat's claw, smoke tree, I tamarisk) in areas that are most likely to be influenced by groundwater (low-lying areas in the basin floor). Monitoring s shall include:  Reference Monitoring Sites: sites outside of the zone of Project influence that can be compared to sites influenced by	Monitoring shall begin no later than April 1st following docketing of the Energy Commission Final Decision and shall occur every year during the same one to two week time period in early spring.	
2.	Project pumping and used to distinguish Project effects from the effects of climate change or normal drought cycles; sites located in state or national parks are least likely to be influenced by human-caused hydrologic alterations.  Project Monitoring Sites: sites within the predicted worst-case scenario drawdown cone around the Project pumping well (Figure 3 of the Groundwater Resources Cumulative Impacts Analysis [Worley-Parsons 2009]), an area within a radius of approximately 10 miles from the Project pumping well. Ford Dry Lake, and the old-growth ironwood forest along the Palen wash are also included within this zone.	On January 31st of each year following the start of data collection, the Designated Biologist shall provide a report, prepared by the plant ecologist supervising the study and analyzing the data, to the CPM that describes monitoring activities and results, including recommendations for remedial action. If monitoring	
3.	Distant Monitoring Sites: sites located near Palen Dry Lake within the predicted worst-case scenario drawdown cone around the Project pumping well around Palen Dry Lake where near-surface groundwater has been detected and where plant communities dominated by phreatophytes occur (including bush seep-weed-dominant alkali sink scrubs).	detects declining spring water tables—in any amount greater than the normal year-to-year variability of spring water tables—combined with a decline in plant	

vigor in groundwater dependent vegetation at the

with reference site data), the supervising plant

Project Monitoring Sites that is not also detected in the

ecologist shall prepare a summary of the data analysis within 30 days of completion of that monitoring.

Reference Sites (by comparing monitoring site data

where plant communities dominated by phreatophytes occur (including bush seep-weed-dominant alkali sink scrubs).

In areas where the Project's estimated end of operation effects overlap the Palen Solar Power Project's estimated zone

of water table effects (AECOM 2010a, Figures DR-ALT-207-1 & 2), the Project shall not be responsible for monitoring

groundwater-dependent vegetation unless the Palen project (or other project at same site) is not constructed and/or no

groundwater pumping is proposed by that project.

Con	dition of Certification	Verification	Responsible Agency
ВІО	LOGICAL RESOURCES (cont.)		
be r	eline data shall be collected at all sites prior to the start of pumping, and annual monitoring for the life of the Project shall equired at Project, Distant, and Reference Monitoring sites. A statistician shall be retained to use the first year of baseline to conduct a "priori power analysis" (Elzinga et al. 1998) and evaluate the adequacy of the sampling design.		
The	Vegetation Monitoring Plan shall:		
1.	Be prepared by a qualified plant ecologist with a demonstrated understanding of desert plant ecology and physiology. The plant ecologist overseeing the monitoring and preparing the annual reports shall be approved by the CPM;		
2.	Identify Project Monitoring Sites within the zone of potential Project effect depicted in Figure 3 of the Groundwater Resources Cumulative Impacts Analysis (Worley-Parsons 2009). Monitoring shall focus on areas containing obligate or facultative phreatophytes in areas that are the most likely to be influenced by groundwater (versus surface water) such as low lying areas in the basin floor outside of the stream channels;		
3.	Identify Distant Monitoring sites around Palen Dry Lake where near-surface groundwater and plant communities dominated by phreatophytes occur, including mesquite stands, bush seepweed-dominant sink scrubs, and dune scrubs;		
4.	Identify Reference Monitoring Sites within the Sonoran or Colorado Desert regions of California that contain examples of the target groundwater-dependent plant communities represented at the Project and Distant Monitoring Sites. Reference sites shall be characterized by surface and groundwater hydrology unaltered by anthropogenic influences such as groundwater pumping or other diversions. Sites located in state park and national park lands or wilderness areas are likely candidates for reference sites;		
5.	Provide a detailed description of sampling protocol for collecting a minimum of three years of baseline data from the Reference, Project, and Distant Monitoring Sites. The sampling protocol shall include a requirement that monitoring data be collected from all three monitoring sites at the same time of year at the start of the growing season (for example, March 15). A statistician shall be consulted during the design phase to conduct a "priori power analysis" (Elzinga et al. 1998) prior to determining an appropriate sample size achieve adequate power;		
6.	Provide a detailed description of the long-term data collection approach including: sampling objectives (target/threshold, change/trend-based) attributes measured, field techniques, minimum standards for monitoring personnel, data management, statistical analysis, monitoring schedule, reporting requirements, and responsible parties;		
7.	Include appropriate field techniques for measuring drought response, including (at a minimum): percent dieback; live crown density; percent cover of live (versus dead or residual) vegetation, and any other vigor indicators that detect subtle changes over time; percent cover/frequency of associated species, changes over time in percent composition of native versus non-native species, and facultative wetland plants present. A detailed description of monitoring protocol shall also be included (for example, photo monitoring at permanent photo stations, among other monitoring techniques);		
8.	Include a description of the biological and ecological characteristics of groundwater-dependent species and natural communities, such as whether species are obligate vs. facultative; root growth and water acquisition; morphological adaptations to the desert environment; reproduction and germination; general and micro-habitat preferences; salt tolerance; role in the morphology of dunes; wildlife uses, etc;		

Condition of Certification	Verification	Responsible Agency
BIOLOGICAL RESOURCES (cont.)		
9. Describe annual reporting requirements, which shall include (at a minimum): summaries of the results of the Groundwater Well Monitoring (Soil&Water-5) and a comparison of predicted versus actual water table declines during the early spring monitoring period, summary of the Vegetation Monitoring data, sampling and monitoring techniques used, field measurements employed, names and contact information for the monitoring personnel and responsible parties, description of data management, statistical analysis, photos, and conclusions.		
<u>Trigger for Remedial Action:</u> The Project owner shall implement remedial action, as described in Condition of Certification <b>BIO-26</b> , if the monitoring described in <b>BIO-25</b> detects declining spring water tables—in any amount greater than the normal year-to-year variability—combined with a decline in plant vigor in groundwater dependent vegetation at the Project Monitoring Sites compared to the Reference Monitoring Sites. The baseline spring water table depth, as measured in groundwater monitoring conducted pursuant to Soil & Water-4 and 5, shall be established based on the normal range of variability in area shallow water tables in spring (March 15-April 1).		
The project owner may not pump groundwater from the site until the final Vegetation Monitoring Plan has been reviewed and approved by the CPM.		
Remedial Action for Adverse Effects to Groundwater-Dependent Biological Resources		
BIO-26 The Project owner shall implement remedial action if the monitoring described in BIO-25 detects project-related declining spring water tables—in any amount greater than the normal year-to-year variability—combined with a decline in plant vigor in groundwater dependent vegetation at the Project Monitoring Sites compared to the Reference Monitoring Sites. The baseline spring water table depth, as measured in groundwater monitoring conducted pursuant to Soil & Water-4 and 5, shall be established based on the normal range of variability in area shallow water tables in spring (March 15-April 1). The Project owner shall submit a detailed proposal for remedial action to be approved by the CPM. Remedial measures must include one of the following measures to meet the performance standard of restoring the spring groundwater tables to baseline levels: 1) Relocating the Project pumping well to another location farther from the groundwater-dependent vegetation (and where the dependent vegetation is no longer within the drawdown cone of depression), or—alternatively—constructing a new well farther away and reducing water usage in the well closest to the dependent plant communities; 2) Reducing the Project water usage through water conservation methods or new technologies.  The proposal shall clearly demonstrate that the proposed remedial action would restore the spring groundwater tables to baseline levels to sustain healthy ecological functioning in the affected plant communities. The Project owner may choose the	Within 90 days following submission of the data summary described in BIO-25 that triggers remedial action according to the threshold described in BIO-25, the Project owner shall submit to the CPM a draft, or conceptual plan for remedial action. The draft plan shall summarize the data and observations describing the adverse effect, including all calculations and assumptions made in development of the report data and interpretations. The draft plan must include, but not limited to, one of the remedial measures described above to meet the performance standard of restoring the spring groundwater table to baseline levels. A final plan shall be submitted to the CPM within 60 days of receipt of the CPM's comments.	
most feasible method of restoring baseline spring water table levels providing it meets this performance standard.  The Project owner must implement remedial action, as approved by the CPM.	No later than one year following approval of the remedial action plan, the Project owner shall provide to the CPM for review and approval, documentation of completed remedial action.  If, after review of the annual monitoring data described	
	in <b>BIO-25</b> and in <b>Soil &amp; Water-5</b> , the CPM agrees, monitoring measurements and frequencies may be revised or eliminated.	

		Responsible
Condition of Certification	Verification	Agency

#### **BIOLOGICAL RESOURCES (cont.)**

#### **Couch's Spadefoot Toad Impact Avoidance and Minimization Measures**

BIO-27 The Project owner shall prepare and implement a Couch's Spadefoot Toad Protection and Mitigation Plan (Protection and Mitigation Plan) to avoid, minimize or mitigate impacts to Couch's spadefoot toads and their breeding habitat during construction and operation of the Project. The Protection and Mitigation Plan shall be approved by the CPM in consultation with CDFG, and shall be incorporated into the Project's BRMIMP and implemented. It is expected that, as currently proposed, the Project could avoid the known breeding pond south of I-10 near Wiley Well Road and minimize impacts to the surrounding upland buffer. The Protection and Mitigation Plan shall address methods to achieve this avoidance and minimization, and shall include avoidance, minimization, and mitigation measures that would be required if additional habitat is found during habitat surveys. The Protection and Mitigation Plan shall include, at a minimum:

#### 1. Habitat Survey Results:

- a. Survey methodology;
- Survey results, including a detailed discussion of potential breeding sites, and a description of areas determined not to include breeding habitat; and
- Figures showing the areas surveyed and the location of potential breeding habitat in relation to proposed Project features

#### Impacts Assessment from:

- a. Habitat disturbance from construction;
- Noise from construction, operations, and potential ORV traffic;
- c. Increased access for vehicles from road construction or improvements;
- d. Changes in breeding habitat due to changes in flow levels and flow patterns to breeding ponds;
- e. Increased traffic from construction and operations;
- Increased risk of predation.

#### Avoidance and Minimization Measures:

- Description of measures that would be implemented to avoid impacts to potential breeding ponds, such as design strategies; protective fencing or other barriers, worker's education, minimizing construction traffic within the vicinity of breeding ponds, and biological monitoring;
- b. Designation of a Management Area around breeding ponds that includes an appropriate upland buffer, and a description of measures used to minimize impacts within this buffer.
- 4. <u>Mitigation</u>: If complete avoidance of the pond south of I-10 or other breeding sites identified during surveys is not possible, the Protection and Mitigation Plan shall include plans to create additional breeding habitats (ephemeral pond) at least equal in area to the acreage of ponds being impacted. The created ponds shall be capable of holding water for at least nine days during the spadefoot toad breeding season, and shall be established as close as possible (no more

No less than 30 days prior to construction-related ground-disturbance the Project owner shall submit to the CPM and CDFG a final Protection and Mitigation Plan. Modifications to the Protection and Mitigation Plan shall be made only after approval from the CPM, in consultation with CDFG.

If the Protection and Mitigation Plan includes creation of ponds, the number and acreage of created ponds shall be described in the plan. No less than 90 days prior to operation of Project the Project owner shall provide to the CPM as-built drawings and photographs of the created ponds and maps showing the size and location of the ponds in relation to project features. On January 31<sup>st</sup> of every year following initiation of operation of the Project the Project owner shall submit reports to the CPM documenting the capacity of the created ponds to hold water for at least 9 days during the spadefoot toad breeding season. If ponds fail to hold water as described above the Project owner shall implement remedial actions. The annual reporting may be terminated upon satisfactory demonstration of this performance standard, and with approval of the CPM.

Со	ndition of Certification	Verification	Responsible Agency
віс	DLOGICAL RESOURCES (cont.)		
	than ¼ mile) from the location of the impacted ponds. The created ponds shall be monitored and managed to ensure fulfillment of this performance standard by site visits at the pond following summer rainfall events. If the created ponds fail to achieve this standard, remedial action shall be implemented (for example, by compacting the soil in the pond to increase water-holding capacity).		
Go	Iden Eagle Inventory and Monitoring		
	D-28 The Project owner shall implement the following measures to avoid or minimize Project-related construction pacts to golden eagles.  Annual Inventory During Construction. For each calendar year during which construction will occur an inventory shall be conducted to determine if golden eagle territories occur within one mile of the Project boundaries. Survey methods for the inventory shall be as described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS.  Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.  Determination of Unoccupied Territory Status: A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles ONLY after completing at least 2 full surveys in a single breeding season.  Monitoring and Adaptive Management Plan: If an occupied nest is detected within one mile of the Project boundaries, the Project owner shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that Project construction activities do not result in injury or disturbance to golden eagles.	No fewer than 30 days from completion of the golden eagle inventory the project owner shall submit a report to the CPM, CDFG, and USFWS documenting the results of the inventory.  If an occupied nest is detected within one mile of the Project boundary during the inventory the Project shall contact staff at the USFWS Carlsbad Office and CDFG within one working day of detection of the nest for interim guidance on monitoring and nest protection. The project owner shall provide the CPM, CDFG, and USFWS with the final version of the Golden Eagle Monitoring and Management Plan within 30 days after detection of the nest. This final Plan shall have been reviewed and approved by the CPM in consultation with USFWS and CDFG.	
In-	Lieu Fee Mitigation Option		
ins in-l	The Project owner may choose to satisfy its mitigation obligations identified in this Decision by paying an in lieu fee tead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable ieu fee provision, to the extent the in-lieu fee provision is found by the Commission to be in compliance with CEQA and SA requirements.	If electing to use this provision, the Project owner shall notify the Commission that it would like a determination that the Project's in-lieu fee proposal meets CEQA and CESA requirements.	

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES		
CUL-1 Prehistoric Trails Network Cultural Landscape (PTNCL) Documentation and Possible NRHP Nomination  The project owner shall contribute to a special fund set up by the Energy Commission and/or BLM to finance the completion of the PTNCL Documentation and Possible NRHP Nomination program presented in the cultural PTNCL Genesis Solar Energy Project (GSEP) Revised Staff Assessment (RSA).  The amount of the contribution shall be \$35 per acre that the project encloses or otherwise disturbs. An additional contribution may be required to ensure the completion of the required documentation and possible NRHP nomination. Any additional contringency contribution is not to exceed an amount totaling 20% of the total original contribution. The contribution to the special fund may be made in installments at the approval of the CPM, with the first installment to constitute 1/3 of the total original contribution amount.  If a project is not certified, or if a project owner does not build the project, or, if for some other reason deemed acceptable by the CPM, a project owner does not participate in funding the PTNCL documentation and possible NRHP nomination program, the other project owner(s) may consult with the CPM to adjust the scale of the PTNCL documentation and possible NRHP nomination program research activities to match available funding. A project owner that funds the PTNCL documentation and possible NRHP nomination program, then withdraws, will be able to reclaim their monetary contribution, to be refunded on a prorated basis.	No later than 10 days after receiving notice of the successful transfer of funds for any installment to the Energy Commission's and/or BLM's special PTNCL fund, the project owner shall submit a copy of the notice to the Energy Commission's Compliance Project Manager (CPM).	CEC/BLM
CUL-2 Desert Training Center California-Arizona Maneuver Area Cultural Landscape (DTCCL) Documentation and Possible NRHP Nomination  The project owner shall contribute to a special fund set up by the Energy Commission and/or BLM to finance the completion of the Documentation and Possible NRHP Nomination program presented in the GSEP RSA.  The amount of the contribution shall be \$25 per acre that the project encloses or otherwise disturbs. An additional contribution may be required to ensure the completion of the required documentation and possible NRHP nomination. Any additional contringency contribution is not to exceed an amount totaling 20% of the total original contribution. The contribution to the special fund may be made in installments at the approval of the CPM, with the first installment to constitute 1/3 of the total original contribution amount.  If a project is not certified, or if a project owner does not build the project, or, if for some other reason deemed acceptable by the CPM, a project owner does not participate in funding the DTCCL documentation and possible NRHP nomination program, the other project owner(s) may consult with the CPM to adjust the scale of the DTCCL documentation and possible NRHP nomination program research activities to match available funding. A project owner that funds the DTCCL documentation and possible NRHP nomination program, then withdraws, will be able to reclaim their monetary contribution, to be refunded on a prorated basis.	No later than 10 days after receiving notice of the successful transfer of funds for any installment to the Energy Commission's and/or BLM's special DTCCL fund, the project owner shall submit a copy of the notice to the CPM.	CEC/BLM

		Responsible
Condition of Certification	Verification	Agency

#### **CULTURAL RESOURCES (cont.)**

#### CUL-3 Cultural Resources Personnel

Prior to the start of ground disturbance (includes "preconstruction site mobilization", "ground disturbance," and "construction grading, boring, and trenching," as defined in the General Conditions for this project), the project owner shall obtain the services of a Cultural Resources Specialist (CRS), one or more alternate CRSs, if alternates are needed, and the technical specialists identified below in this condition. The CRS can also serve in the role of one or more of the technical specialists if that person has the requisite qualifications.

The CRS shall manage all cultural resources mitigation, monitoring, curation, and reporting activities in accordance with the Conditions of Certification (Conditions). The CRS shall have a primarily administrative and coordinative role for the GSEP. The project owner shall ensure that the CRS implements the cultural resources conditions, providing for data recovery from known historical resources, and shall ensure that the CRS makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be impacted in an unanticipated manner. The CRS may obtain the services of field crew members and cultural resources monitors (CRMs), if needed, to assist in mitigation, monitoring, and curation activities. No ground disturbance shall occur prior to CPM approval of the CRS and alternates, unless such activities are specifically approved by the CPM. Approval of a CRS may be denied or revoked for reasons including but not limited to noncompliance on this or other Energy Commission projects.

#### **Cultural Resources Specialist**

The resumes for the CRS and alternate(s) shall include information demonstrating to the satisfaction of the CPM that their training and backgrounds conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the CRS shall have the following qualifications:

- 1. A background in anthropology and prehistoric archaeology;
- 2. At least 10 years of archaeological resource mitigation and field experience, with at least 3 of those years in California; and
- 3. At least 3 years of experience in a decision-making capacity on cultural resources projects, with at least 1 of those years in California, and the appropriate training and experience to knowledgably make recommendations regarding the significance of cultural resources.

#### Required Cultural Resources Technical Specialists

The project owner shall ensure that the CRS obtains the services of a qualified prehistoric archaeologist to conduct the research specified in **CUL-10**, **CUL-11**, and **CUL-12**. The Project Prehistoric Archaeologist's (PPA) training and background must meet the U.S. Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology, as published in Title 36, Code of Federal Regulations, part 61, and the resume of the PPA must demonstrate familiarity with similar artifacts and environmental modifications (deliberate and incidental) to those associated with the prehistoric and protohistoric use of the Chuckwalla Valley. The PPA must meet OSHA standards as a "Competent Person" in trench safety.

If mechanical excavation is required during the excavation of CA-Riv-9072, the project owner shall ensure that the CRS obtains the services of a specialist backhoe operator to conduct the subsurface mechanical excavation\_described in **CUL-11**. This backhoe operator shall have a resume that demonstrates previous experience using a backhoe in coordination with an archaeologist. In addition the operator shall use a machine with a "stripping bucket" that is sensitive enough to remove even and consistent layers of sediment 5 cm thick.

- 1. No less than 75 days prior to the start of ground disturbance, the project owner shall submit the resumes for the CRS, the alternate CRS(s) if desired, the PPA, the PE, the PHA, and the PG to the CPM and BLM. if desired by BLM. for review and approval.
- 2. At least 10 days prior to the start of data recovery on known archaeological sites, the project owner shall confirm in writing to the CPM that the approved CRS, the PPA, the PE, the PHA, and the PG will be available for on-site work and are prepared to implement the cultural resources Conditions CUL-8, CUL-10, CUL-11, CUL-12, and CUL-17.
- 3. At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS to the CPM and BLM, if desired by BLM, for review and approval. At the same time, the project owner shall also provide to the proposed new CRS the AFC and all cultural resources documents. field notes, photographs, and other cultural resources materials generated by the project. If no alternate CRS is available to assume the duties of the CRS, a monitor may serve in place of a CRS so that ground disturbance may continue up to a maximum of 3 days without a CRS. If cultural resources are discovered then ground disturbance will remain halted until there is a CRS or alternate CRS to make a recommendation regarding significance.
- 4. At least 15 days prior to data recovery on known archaeological sites, the CRS shall provide a letter naming anticipated field crew members for the project and attesting that the identified field crew members meet the minimum qualifications for cultural resources data recovery required by this Condition.
- 5. At least 15 days prior to ground disturbance, the CRS shall provide a letter naming anticipated CRMs for the project and attesting that the identified CRMs meet the minimum qualifications for cultural resources monitoring required by this Condition.

CEC/BLM

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES (cont.)		
The project owner shall ensure that the CRS obtains the services of a qualified ethnographer to conduct the research and activities specified in <b>CUL-16</b> , <i>if one is not hired</i> by the PTNCL PI for the overall duties as described in the PTNCL documentation and possible NRHP nomination program. The Project Ethnographer's (PE) training and background must meet the NPS standards for Anthropologist/Applied Ethnographer (GS-190, 11-12 or 13-15). The PE must have already established long-term relationships with Native American groups whose traditional territories are near GSEP.	6. At least 5 days prior to additional CRMs beginning on-site duties during the project, the CRS shall provide letters to the CPM identifying the new CRMs and attesting to their qualifications.	
The project owner shall ensure that the CRS obtains the services of a qualified historical archaeologist to conduct the research specified in <b>CUL-17</b> . The Project Historical Archaeologist's (PHA) training and background must meet the U.S. Secretary of Interior's Professional Qualifications Standards for historical archaeology, as published in Title 36, Code of Federal Regulations, part 61.		
The project owner shall ensure that the CRS obtains the services of a qualified geoarchaeologist to conduct the research specified in <b>CUL-8</b> , <b>CUL-10</b> , <b>and CUL-11</b> . The resume of the proposed Project Geoarchaeologist (PG) shall demonstrate that the PG's training and background meet the U.S. Secretary of Interior's Professional Qualifications Standards for prehistoric archaeology, as published in Title 36, Code of Federal Regulations, part 61, and show the completion of graduate-level coursework in geoarchaeology or Quaternary science.		
The resumes of the CRS, alternate CRS, PPA, PE, PHA, and PG shall include the names and telephone numbers of contacts familiar with the work of these persons on projects referenced in the resumes and demonstrate to the satisfaction of the CPM that these persons have the appropriate training and experience to undertake the required research. The project owner may name and hire the CRS, alternate CRS, the PPA, and the PHA prior to certification.		
Field Crew Members And Cultural Resources Monitors		
CRMs and field crew members shall have the following qualifications:		
1. A B.S. or B.A. degree in anthropology, archaeology, historical archaeology, or a related field, and one year experience monitoring in California; or		
2. An A.S. or A.A. degree in anthropology, archaeology, historical archaeology, or a related field, and four years experience monitoring in California; or		
3. Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and two years of monitoring experience in California.		
CUL-4 Project Documents for Cultural Resources Personnel	No less than 60 days prior to the start of ground	
Prior to the start of ground disturbance, the project owner shall provide the CRS, the PPA, the PE, the PHA, and the PG with copies of the AFC, data responses, confidential cultural resources documents, the Revised Staff Assessment (RSA), and the RSA Supplement/Errata, if any, for the project. The project owner shall also provide the CRS, the PPA, the PE, the PHA, the PG, and the CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate USGS quadrangles and maps at an appropriate scale (e.g., 1:2400 or 1" = 200") for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. Staff shall review map submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. No ground disturbance shall occur prior to CPM approval of maps and drawings, unless such activities are specifically approved by the	disturbance, the project owner shall provide the AFC, data responses, confidential cultural resources documents, the Revised Staff Assessment (RSA), and RSA Supplement/Errata to the CRS, if needed, and to the PPA, the PHA, and the PG. The project owner shall also provide the subject maps and drawings to the CRS, PPA, PE, PHA, PG, and CPM. Staff, in consultation with the CRS, PPA, and PHA, will review and approve maps and drawings suitable for cultural	

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES (cont.)		
CPM. Release of cultural resources information will be pending BLM approval.  If construction of the project would proceed in phases, maps and drawings not previously provided shall be provided to the CRS, the PPA, the PHA, the PG, and CPM prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.  Weekly, until ground disturbance is completed, the project construction manager shall provide to the CRS and CPM a schedule of project activities for the following week, including the identification of area(s) where ground disturbance will occur during that week. The project owner shall notify the CRS and the CPM of any changes to the scheduling of the construction phases.	resources monitoring and data recovery activities.  2. At least 15 days prior to the start of ground disturbance, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS, PPA, PHA, and CPM.  3. At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS, PPA, PHA, and CPM.  4. Weekly, during ground disturbance, a current schedule of anticipated project activity shall be provided to the CRS and CPM by letter, e-mail, or fax.  5. Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide	
CUL-5 Cultural Resources Monitoring and Mitigation Plan  Prior to the start of ground disturbance, the project owner shall submit to the CPM for review and approval the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by or under the direction of the CRS, with the contributions of the PPA, the PHA, and the PG. The authors' name(s) shall appear on the title page of the CRMMP. The CRMMP shall specify the impact mitigation protocols for all known cultural resources and identify general and specific measures to minimize potential impacts to all other cultural resources, including those discovered during construction. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate  CRS, the PPA, the PE, the PHA, the PG, each CRM, and the project owner's on-site construction manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless such activities are specifically approved by the CPM. Prior to certification, the project owner may have the CRS, alternate CRS, the PPA, and the PHA complete and submit to Energy Commission for review the CRMMP, except for the portions to be contributed by the PTNCL and the DTCCL programs.  The CRMMP shall include, but not be limited to, the elements and measures listed below.  1. The following statement shall be included in the Introduction: "Any discussion, summary, or paraphrasing of the Conditions of Certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A."	1. No less than 30 days prior to the start of ground disturbance, the project owner shall submit the CRMMP to the CPM for review and approval.  2. At least 20 days prior to the start of ground disturbance, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).  3. At least 30 days prior to the initiation of ground disturbance, the project owner shall provide to the CPM a copy of a letter from a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, stating the facility's willingness and ability to receive the materials generated by GSEP cultural resources activities and requiring curation. Any agreements concerning curation will be retained and available for audit for the life of the project.	CEC/BLM

Verification	Responsible Agency
	Verification

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES (cont.)		
10. The commitment to record on Department of Parks and Recreation (DPR) 523 forms, to map, and to photograph all encountered cultural resources over 50 years of age shall be stated. In addition, the commitment to curate all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery), in accordance with the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository or museum shall be stated.		
11. The commitment of the project owner to pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project shall be stated. The project owner shall identify a curation facility that could accept cultural resources materials resulting from GSEP cultural resources investigations.		
12. The CRS shall attest to having access to equipment and supplies necessary for site mapping, photography, and recovery of all cultural resource materials (that cannot be treated prescriptively) from known CRHR-eligible archaeological sites and from CRHR-eligible sites that are encountered during ground disturbance.		
13. The contents, format, and review and approval process of the final Cultural Resource Report (CRR) shall be described.		
CUL-6 Cultural Resources Report (CRR)  The project owner shall submit the final Cultural Resources Report (CRR) to the CPM for review and comment and to the BLM Palm Springs archaeologist for review and approval. The final CRR shall be written by or under the direction of the CRS and shall be provided in the ARMR format, as specified by the California State Historic Preservation Office. The final CRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, revised and final Department of Parks and Recreation (DPR) 523 forms, data recovery reports, and any additional research reports not previously submitted to the California Historical Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as appendices to the final CRR.  If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM and to the BLM Palm Springs archaeologist for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.	1. Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.  2. Within 180 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CRR to the CPM for review and approval and to the BLM Palm Springs Field Office archaeologist for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.  3. Within 10 days after the CPM and the BLM Palm Springs Field Office archaeologist approve the CRR, the project owner shall provide documentation to the CPM confirming that copies of the final CRR have been provided to the SHPO, the CHRIS, the curating institution, if archaeological materials were collected, and to the Tribal Chairpersons of any Native American groups requesting copies of project-related reports.	CEC/BLM
CUL-7 Worker Environmental Awareness Program (WEAP)  Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness  Program (WEAP) training to all new workers within their first week of employment at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas. The training shall be prepared by the CRS in consultation with local Native Americans and shall incorporate the traditions and beliefs of local Native American groups into the presentation.	At least 30 days prior to the beginning of ground disturbance, the CRS shall provide the training program draft text and graphics and the informational brochure to the CPM for review and approval.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES (cont.)		
If consultation with local Native Americans is not possible, the CRS shall consult, instead, with an ethnographer, either the PTNCL Ethnographer or the GSEP PE, on the content of the presentation. The presentation may be conducted by any member of the archaeological team and a Native American, if possible (preferably the Native American serving as a construction monitor under CUL-8), and may be presented in the form of a video. A consulting fee or honorarium shall be negotiated with the local Native American consultants and presenter and paid to them for their participation. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended, but must be resumed when ground disturbance, such as landscaping, resumes.  The training shall include:  1. A discussion of applicable laws and penalties under the law;  2. Samples or visuals of artifacts that might be found in the project vicinity;  3. A discussion of what such artifacts may look like when partially buried, orwholly buried and then freshly exposed;	2. At least 15 days prior to the beginning of ground disturbance, the CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP trained worker to sign.  3. Monthly, until ground disturbance is completed, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.	
4. A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits;		
5. A discussion of what local Native American beliefs are, how those beliefs are related to archaeological resources that may be found in the area, and the appropriate respectful behavior towards sacred places and objects;		
6. Instruction that the CRS, alternate CRS, and CRMs have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;		
7. Instruction that employees are to avoid areas flagged as sensitive for cultural resources;		
8. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or CRM, and that redirection of work would be determined by the construction supervisor and the CRS;		
9. An informational brochure that identifies reporting procedures in the event of a discovery;		
10. An acknowledgement form signed by each worker indicating that they have received the training; and		
11. A sticker that shall be placed on hard hats indicating that environmental training has been completed.		
No ground disturbance shall occur prior to implementation of the WEAP program, unless such activities are specifically approved by the CPM.		
CUL-8 Construction Monitoring Program	At least 30 days prior to the start of ground	CEC/BLM
Staff expects the Qoaf alluvium to be reached during grading across most of the site. The project owner shall ensure that the CRS, alternate CRS, or CRMs monitor full time all ground disturbance, if allowed by the BLM, until the CRS, alternate CRS, or CRMs certify that the <a href="sterile Qoaf alluvium">sterile Qoaf alluvium</a> has been reached. This will include ground disturbance at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.	disturbance, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log.	
	Within 15 days of receiving from a local Native     American group a request that a Native American	

CONDITIONS OF CERTIFICATION			
Condition of Certification	Ve	rification	Responsible Agency
CULTURAL RESOURCES (cont.)			
During utility trenching along the linear corridor, which is expected to reach a depth of 10 feet, the face of each trench shall be examined for features. While the utility trench is open, the owner shall arrange for a geoarchaeologist with qualifications described in CUL-3 to observe the exposed stratigraphy. This specialist shall collect information and samples that will aid in the paleo-environmental reconstruction of Ford Dry Lake over the last 14,000 years, as specified in the PTCNL documentation and possible NRHP nomination program funded under CUL-1.		monitor be employed, the project owner shall submit a copy of the request and a copy of a response letter to the group notifying them that a Native American monitor has been employed and identifying the Native American monitor.	
Full-time archaeological monitoring for this project shall be the archaeological monitoring of the earth-removing activities in the areas specified in the previous paragraph, for as long as the activities are ongoing. Where excavation equipment is actively removing dirt and hauling the excavated material farther than 50 feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material.	3.	Monthly, while monitoring is on-going, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.	
In the event that the CRS believes that the required number of monitors is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the number of monitors shall be provided to the CPM for review and approval prior to any change in the number of monitors.	4.	proposed change in monitoring level, the project owner shall submit to the CPM, for review and	
The project owner shall obtain a Native American monitor to monitor ground disturbance if local Native American groups so request. Contact lists of interested Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. Staff will either identify potential monitors or will allow ground disturbance to proceed without a Native American monitor.	5.	approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.  Daily, as long as no cultural resources are found, the CRS shall provide a statement that "no	
The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.		cultural resources over 50 years of age were discovered" to the CPM as an e-mail or in some other form of communication acceptable to the	
On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.	6.	CPM.  At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable	
The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM.		to the CPM) detailing the CRS's justification for reducing or ending daily reporting.	
In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.	7.	any Native American cultural materials, the project owner shall submit to the CPM copies of the	
The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities, including PTNCL sites monitoring, with Energy Commission technical staff.		information transmittal letters sent to the Chairpersons of the Native American tribes or groups who requested the information. Additionally,	
Cultural resources monitoring activities, including PTNCL sites monitoring, are the responsibility of the CRS. Any interference		the project owner shall submit to the CPM copies of	

letters of transmittal for all subsequent responses

to Native American requests for notification,

with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate

Con	ndition of Certification	Vei	rification	Responsib Agency
CUL	TURAL RESOURCES (cont.)			
mon	nitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.		consultation, and reports and records.	
proje to re desc	on becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the ect owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action esolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report cribing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be vided in the next MCR for the review of the CPM.	8.	Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information.	
CUL	-9 Authority to Halt Construction; Treatment of Discoveries	1.	At least 30 days prior to the start of ground	CEC/BLM
in th by th	The project owner shall grant authority to halt ground disturbance to the CRS, alternate CRS, PPA, PHA, PG, and the CRMs in the event of a discovery of a cultural resource over 50 years of age, or younger if determined to be exceptionally significant by the CPM. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.  In the event that a cultural resource over 50 years of age is found (or if younger, determined exceptionally significant by the CPM), or impacts to such a resource can be anticipated, ground disturbance shall be halted or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. Monitoring and daily reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere. The halting or redirection of ground disturbance shall remain in effect until the CRS has visited the discovery, and all of the following have		disturbance, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, PPA, PHA, PG, and CRMs have the authority to halt ground disturbance in the vicinity of a cultural resources discovery, and	
CPN vicir as p redii			that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.	
	The CRS has notified the project owner and the BLM Palm Springs Field Office archaeologist, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of CRHR eligibility, and	2.	Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all Native American groups that expressed a desire to be notified in the event of such a discovery.	
	recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.	3.	Unless the discovery can be treated prescriptively, as specified in the CRMMP,	
2.	If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.		completed DPR 523 forms for resources newly discovered during ground disturbance shall be	
3.	The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary" form shall include a recommendation on the CRHR eligibility of the discovery. The project owner shall submit completed forms to the CPM.		submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural	
4.	The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery plan, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.		resource.	
Prio	<b>L-10</b> Data Recovery for Small Sites or to the start of ground disturbance, the project owner shall ensure that the CRMMP includes a data recovery plan for the point sites: CA-Riv-9084, CA-Riv-9209, CA-Riv-9215, CA-Riv-9216, CA-Riv-9220, CA-Riv-9223 and CA-Riv-9227. This	1.	At least 15 days prior to commencing data recovery on any of these sites, the project owner shall notify the CPM that data recovery for small	CEC/BLM

Co	Condition of Certification		Verification	
CU	LTURAL RESOURCES (cont.)			
me	list may be revised only with the agreement of the CRS and the CPM. When ground disturbance will start within 30 ters of the boundaries of these sites, the project owner shall ensure that the CRS, the PPA, and/or archaeological team mbers implement the plan, if allowed by the BLM, which shall include, but is not limited to the following tasks:	2.	sites has ensued.  Within one week of the completion of data recovery at a site, the project owner shall verify	
1.	Use location recordation equipment that has the latest technology with sub-meter accuracy (such as UTM 11 North or California Teale Albers) to add to the original site maps the following features: seasonal drainages, site boundaries, location of each individual artifact, and the boundaries around individual artifact concentrations;		this by submitting a letter report written by the PPA or CRS for review and approval of the CPM. When the CPM approves the letter report, ground	
2.	Collects all artifacts after their locations are marked, and submits them for laboratory analysis;		disturbance may begin at these site locations.	
3.	Requests the PG to identify the specific landform for each site and its relationship to specific ancient lakeshores of Ford Dry Lake. If a lakeshore is present within 100 meters of the site boundary, it shall be included on the site map;			
4.	Excavates one 1-meter-by-1-meter unit in 10-centimeter levels until the unit reaches the top of the Qoaf alluvium, placing these units in the part of the site with the highest artifact density			
5.	Places, one 1-meter-by-1-meter excavation unit, as described above, in the center of each concentration if multiple artifact concentrations have been identified;			
6.	Tests the horizontal limits of the site by placing test units down to the upper boundary of the Qoaf alluvium with a shovel or hand auger, or other similar technique, at four spots equally spread around the exterior edge of each site;			
7.	Continues exploring the extent of the site using methods described in <b>CUL-11</b> , if features or other buried deposits are identified. Plans for this contingency shall be described in detail in the CRMMP. If no buried deposits are found, data recovery is complete;			
8.	Presents the results of the <b>CUL-10</b> data recovery in a letter report by the PPA or CRS, which shall serve as a preliminary report. Letter reports may address one site, or multiple sites depending on the needs of the CRS. The letter report shall be a concise document the provides description of the schedule and methods used in the field effort, a preliminary tally of the numbers and types of features and deposits that were found, a discussion of the potential range of error for that tally, and a map showing the location of excavation units including topographic contours and the site landforms;			
9.	Updates the existing Department of Parks and Recreation (DPR) 523 site form for these sites, including new data on seasonal drainages, site boundaries, location of each individual artifact, the boundaries around individual artifact concentrations, and the landform; and			
10.	Presents the final results of data recovery at these prehistoric sites in the CRR, as described in CUL-6.			
CU	L-11 Data Recovery for Large Sites	1.	At least 45 days prior to ground disturbance, the	CEC/BLM
	or to the start of ground disturbance, the project owner shall ensure that the CRMMP includes a plan to recover data from		project owner shall notify the CPM that data recovery for large sites has ensued.	
bοι	se parts of site CA-Riv-9072 that the project will directly impact. When ground disturbance will start within 30 meters of the indaries of this site, the project owner shall ensure that the plan is implemented, if allowed by the BLM. The sub-surface a recovery plan shall, at a minimum, include the following:	2.	Within one week of completing data recovery at a site, the project owner shall submit to the CPM for	
1.	The research questions to be addressed by the data recovery at this potential PTNCL contributor, based on any context written by PTNCL staff as funded by CUL-1.		review and approval a letter report written by the CRS, evidencing that the field portion of data recovery at each site has been completed. When	

Con	ditio	n of Certification	Verification	Responsible Agency
CUL	.TUR	AL RESOURCES (cont.)		
2.	The accurate and conspicuous marking with lath and flagging of that portion of the site that is inside plant site boundaries and subject to destruction; this area shall constitute the study area for each site;		the CPM approves the letter report, ground disturbance may begin at the site location(s) that	
3.	The	e detailed examination of the surface within the site study area;	are the subject of the letter report. 3. At least 15 days before the presentation of the CA-Riv-9072 paper at a professional conference, the project owner shall submit to the CPM and BLM for review and approval the draft of the required research paper.	
4.	(su land sha loca	e creation of a digital map using location recordation equipment using the latest technology with sub-meter accuracy ch as UTM 11 North or California Teale Albers); the map shall include at a minimum: the site boundary, local dforms, features, and the boundaries around artifact concentrations; point proveniencing on the map of all artifacts ill be used unless, in cases of high artifact density, alternative methods can be negotiated with the CPM. After the ation of each artifact is marked, it shall be collected for analysis; FAR (fire-affected rock—rock that shows evidence laving been in prolonged contact with fire) that is not also groundstone, may be counted and discarded;		
5.		e testing of the horizontal limits of the site by placing test units down to the upper boundary of the Qoaf alluvium ng hand excavation, augers, or other similar non-mechanical technique;		
6.		e testing results to determine additional excavation that the CRS, the PPA, BLM, and the CPM shall agree upon and order to explore the spatial variability in the physical and material character and the chronology of the site;		
7.	rec	nechanical excavation is used to identify buried deposits, a trenching plan shall be included in the <b>CUL-11</b> data overy plan in the CRMMP, shall specify the location of the trenches and the strategy behind their placement at each ; at a minimum the trenching plan shall:		
	a.	Result in a 2.5 percent sample of the portion of the site expected to be destroyed, trench spacing between 10-m to 50-m, and a trench orientation from north-south, unless site specific conditions suggest better results using a different arrangement;		
	b.	Use backhoe trenches two feet wide and generally dug to depths no greater than 5 feet to conform to OSHA standards;		
	C.	Use stepped trenches or hydraulic shoring if a depth greater than 5 feet is required to investigate archaeological features, to comply with OSHA regulations;		
	d.	Require trench walls, excavated within the boundaries of the archaeological site, to be scraped with hand tools to provide a clear exposure of subsurface cultural remains;		
	e.	Require archaeological features identified in trench walls to be marked and assigned a number; and		
	f.	Require the completion of a trench record form for each trench that includes its essential characteristics (trench number, length, width, and depth), the locations and types of archaeological features, the stratigraphy and characteristics of exposed sediments, and locations of disturbances such as tree roots or animal burrows.		
8.	The	e requirements that:		
	a.	All identified features shall be documented through standardized forms, scaled profile drawings, plan view maps, and photographs;		
	b.	Between 50 and 100 percent of the features identified shall be fully or partially excavated, depending on their state of preservation and the presence or absence chronologically relevant materials;		

Con	Condition of Certification		Ve	rification	Responsible Agency
CUL	TUR	AL RESOURCES (cont.)			
	C.	The proportion of excavated features shall be negotiated between the owner and the CPM, depending on the nature of the features identified, their rarity, and their information potential; and			
	d.	Buried features shall be excavated by hand or by mechanical "stripping" with a backhoe bucket to remove sterile overburden until 20 centimeters above the limits of the feature, as identified in the trench wall, then excavating the remainder of the feature by hand, using the standard archaeological methods as outlined by the California SHPO; and			
	e.	Samples such as flotation, pollen, and charcoal shall be methodically collected from appropriate contexts, and artifacts such as lithics, ceramics, groundstone, and shell shall be subject to the professionally appropriate laboratory analyses.			
9.	The	e determination of the age and function of the site, if possible;			
10.		etter report, which shall serve as a preliminary report, written by the CRS, submitted to the CPM that details what s found at each site, as follows:			
	a.	Letter reports may address one site, or multiple sites depending on the needs of the CRS; and			
	b.	The letter report shall be a concise document the provides a description of the schedule and methods used in the field effort, a preliminary tally of the numbers and types of features and deposits that were found, a discussion of the potential range of error for that tally, and a map showing the location of excavation units, including topographic contours and the site landforms.			
11.		e updating of the existing DPR 523 site forms including new data on features, artifact analyses and the overall ults of the data recovery and the landform;			
12.		e definitive determination as to whether the site evaluated is a contributing element to the PTNCL, made by the NCL PI using the data collected from the field work;			
13.		e completion of a final, comprehensive report, after all recovered data are analyzed, written by the CRS and/or the nch specialist, or under their direction;			
14.	The	e inclusion of the final version of this report in the CRR (CUL-6).			
15.		e inclusion of relevant portions of the information gathered in the National Register nomination for the PTNCL, if the mination is done;			
16.	pro	he results would be of interest to the professional community, and BLM allows, a paper will be presented at a fessional conference incorporating the final results of all data recovery at CA-Riv-9072, in accordance with all plicable laws.			
CUL	-12	Surface Collection with Sampling for Site CA-RIV-9072	1.	At least 15 days prior to surface collection on site	CEC/BLM
those	e par	ne start of ground disturbance, the project owner shall ensure that the CRMMP includes a plan to recover data from ts of site CA-Riv-9072 that the project will both directly and indirectly impact. When ground disturbance will start meters of the boundaries of this site, the project owner shall ensure that the plan is implemented, if allowed by the	2.	CA-Riv-9072, the project owner shall notify the CPM that the surface collection has ensued.  Within one week of completing data recovery at a site, the project owner shall submit to the CPM for	

Condition of Certification	Verification	Responsible Agency
CULTURAL RESOURCES (cont.)		
BLM. The surface data collection plan shall include, but is not limited to the following:	review and approval a letter report written by the	
1. Completing a surface collection in the part of site CA-RIV-9072 that is inside the plant site boundaries, and thus subject to destruction, prior to ground disturbance in the area; all diagnostic artifacts and features shall be mapped using location recordation equipment that has the latest technology with sub-meter accuracy (such as UTM 11 North or California Teale Albers), and collected; if datable materials are present on the ground surface and in clear association with a feature, a sample of these materials shall be collected;	CRS, evidencing that the surface collection portion of data recovery at each site has been completed.	
<ol><li>Completing additional surface collection transects or units, judgmentally placed in areas of highest artifact density, in total representing 10 percent of the overall site area outside of the plant site boundaries; the artifacts in these transects shall be mapped and then collected;</li></ol>		
<ol> <li>Analyzing the collected artifacts and the incorporate the results into the appropriate section of the CRR for CA-RIV- 9072;</li> </ol>		
4. Writing and submitting to the CPM a letter report by the CRS and PPA, which shall serve as a preliminary report that details what was found at CA-RIV-9072. Letter reports may address one site, or multiple sites depending on the needs of the CRS; the results of the surface collection may be incorporated into the results of the data recovery, required in CUL-11, at the same site, depending on the needs of the CRS;		
5. Ensuring that the letter report is a concise document that provides description of the schedule and methods used in the field effort, a preliminary tally of the numbers and types of features and deposits that were found, a discussion of the potential range of error for that tally, and a map showing the location of collection units including topographic contours and the site landforms; and		
Including the final results of the surface collection at CA-RIV-9072 into the CRR required under <b>CUL-6</b> and in the conference paper required under <b>CUL-11</b> .		
CUL-13 Flag and Avoid	While construction is on-going, the project owner shall	CEC/BLM
Prior to the start of ground-disturbing activities within 30 meters of sites CA-Riv-0260, CA-Riv-0663, and CA-Riv-9072, the project owner shall reduce or avoid impacts to these sites, if allowed by the BLM, by:	ensure that the CRS or other archaeological crew member establish that the temporary site markers are visible and in place on a monthly basis. The status of	
<ol> <li>Ensuring that a CRS, alternate CRS, PPA, or CRM re-establish the portion of the boundary of each site which is within 30 m of the GSEP linear corridor or site footprint, add a 10-meter-wide buffer around this boundary, and flag the resulting space in a conspicuous manner;</li> </ol>	these boundary markers will be reported on in the monthly monitoring summary report.	
2. Ensuring that a CRM enforces avoidance of the flagged areas during GSEP construction;		
CUL-14 DELETED		CEC/BLM
CUL-15 DELETED		CEC/BLM

Cor	ndition of Certification	Verification	Responsible Agency
CUI	LTURAL RESOURCES (cont.)		
If th visit Riv-with Reg this recorded BLM	L-16 Native American Assessment of Impacts and Mitigation Recommendations for Ethnographic Resources e PTNCL documentation and possible NRHP nomination program do not include Native American consultation and site regarding to the McCoy Spring National Register Archaeological District and for four petroglyph sites (CA-Riv-0523, CA- 3149, CA-Riv-4569, and CA-Riv-4699), then prior to the start of construction, the project owner shall have the PE consult local Native American groups to determine what indirect GSEP impacts they identify for the McCoy Spring National gister Archaeological District and for four petroglyph sites (CA-Riv-0523, CA-Riv-3149, CA-Riv-4569, and CA-Riv-4699; site list may be revised only with the agreement of the CRS and the CPM), and to determine what mitigation they sommend. These consultations shall include personal interviews if allowed by BLM and agreed to Native Americans. litionally, the PE must invite interested Native Americans to visit and view the subject district and sites, if allowed by the M. The project owner shall facilitate these visits by providing the necessary equipment and information on the sites.  Project owner shall:  With the approval of BLM, construct a security gate and/or guard at the south end of the access road to prevent unauthorized access.  Will include in the WEAP (CUL-7) training to ensure that all workers are aware that they are prohibited from going outside authorized work areas. Any worker found disturbing any resources will be subject to disciplinary action, including termination.	1. Prior to commencement of grading operations on the plant site, the project owner will provided documentation to the CPM demonstrating that the security gate and/or guard is in place.  2. See CUL-7 for WEAP verification.  3. At least 30 days prior to the start of construction, the project owner shall notify the CPM that the Native American consultation by the PE has been initiated.  4. At least 15 days prior to the start of construction, the project owner shall provide to the CPM and to the BLM Palm Springs Field Office archaeologist the results of the PE's consultation and site visits with local Native American groups concerning the impacts they identify for the PTNCL and what mitigation they recommend for these impacts.	CEC/BLM
Pric arch inclu Riv- the dist	L-17 Historic-Period Site Mapping and In-Field Artifact Analysis or to the start of ground disturbance, the project owner shall ensure that a data recovery plan for the historic-period naeological resources identified within the GSEP site footprint and linear corridor is included in the CRMMP. These sites ude: P33-13508, CA-Riv-9063, CA-Riv-9203, CA-Riv-9204, CA-Riv-9205, CA-Riv-9211, CA-Riv-9213, CA-Riv-9214, CA-9228, CA-Riv-9246, CA-Riv-9259, CA-Riv-9262, and CA-Riv-9263. This site list may be revised only with agreement of the CRS and the CPM. The project owner shall ensure that the plan is implemented when ground urbance will start within 30 meters of the boundaries of these sites, if approved by BLM. The plan must include, but is not ted to, the following:  Research questions addressed by this field work shall be based upon any context developed by DTCCL staff, as funded by CUL-2  The project owner shall hire a PHA with the qualifications described in CUL-3 to supervise the field work.  The project owner shall ensure that, prior to beginning the field work, the PHA and crew chiefs are trained by the DTCCL Historical Archaeologist, or equivalent qualified person approved by the CPM and hired by the project owner should the DTCCL Historical Archaeologist not be available, in the identification, analysis and interpretation of the artifacts, environmental modifications, and trash disposal patterns associated with the early phases of WWII land-based U.S. army activities, as researched and detailed by the DTCCL PI-Historian and the DTCCL Historical Archaeologist  The project owner shall ensure that, prior to beginning the field work, the field crew members are trained in the consistent and accurate identification of the full range of late nineteenth and early-to-mid-twentieth-century can, bottle, and ceramic diagnostic traits.	1. At least 15 days prior to ground disturbance within 30 meters of the boundaries of the subject sites, the project owner shall notify the CPM that historic-period site mapping and in-field artifact analysis has ensued.  2. Within one week of completing data recovery at a site, the project owner shall submit to the CPM for review and approval a letter report written by the CRS, evidencing that the field portion of data recovery at each site has been completed. When the CPM approves the letter report, ground disturbance may begin at the site location(s) that are the subject of the letter report.	CEC/BLM

Con	dition of Certification	Verification	Responsible Agency
CUL	TURAL RESOURCES (cont.)		
5.	The project owner shall ensure that all 15 historic-period archaeological sites shall be revisited by the field of location recordation equipment that has the latest technology with sub-meter accuracy (such as UTM 11 No California Teale Albers), the original site map shall be updated to include at minimum: landform features suddrainages, the location of each artifact, and the limits of any artifact concentrations or other features.	orth or	
6.	The project owner shall ensure that an in-field analysis of all artifacts shall be completed. The dimensions o artifact and feature shall be recorded. Types of seams and closures for each bottle and all cans shall be doc Photographs shall be taken of any text or designs. Unusual or unidentifiable artifacts may be collected for fu analysis, but otherwise artifacts shall not be collected.	cumented.	
7.	The project owner shall ensure that each site shall be examined with a metal detector to determine if buried are present. If such deposits are located, the size and shape of each feature shall be established and a sam materials each feature contains shall be excavated by a qualified historical archaeologist. Details for this conshall be outlined in the CRMMP.	nple of the	
8.	The project owner shall ensure that the details of what is found shall be presented in a letter report from the PHA, which shall serve as a preliminary report, that details what was found at each site, as follows:.	e CRS or	
	a. Letter reports may address one site, or multiple sites depending on the needs of the CRS; and		
	b. The letter report shall be a concise document the provides a description of the schedule and methods u field effort, a preliminary tally of the numbers and types of features and deposits that were found, a dis the potential range of error for that tally, and a map showing the location of collection and/or excavation including topographic contours and the site landforms.	cussion of	
9.	The project owner shall ensure that the data collected from the field work shall be provided to the DTCCL H Archaeologist to assist in the determination of which, if any, of the historic-period sites are contributing elem DTCCL.		
10.	The project owner shall ensure that the PHA analyzes all recovered data and writes or supervises the writin comprehensive final report. This report shall be included in the CRR (CUL-6). Relevant portions of the information gathered shall be included in the possible NRHP nomination for the DTCCL (funded by CUL-2).		
CUL	-18 Compliance with BLM Programmatic Agreement		CEC/BLM
mon Prov Com	ovisions in the BLM Genesis Solar Energy Project Programmatic Agreement and associated implementation a toring programs conflict with or duplicate these Conditions of Certification, the BLM provisions shall take precisions in these conditions that are additional to or exceed BLM provisions and represent requirements under mission's CEQA responsibilities shall continue to apply to the project's activities, contingent on BLM's approverized by federal law.	cedence. the Energy	

Condition of Certification	Verification	Responsible Agency
FACILITY DESIGN		
<b>GEN-1</b> The project owner shall design, construct, and inspect the project in accordance with the 2007 California Building Standards Code (CBSC), also known as Title 24, California Code of Regulations, which encompasses the California Building Code (CBC), California Building Standards Administrative Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, California Code for Building Conservation, California Reference Standards Code, and all other applicable engineering LORS in effect at the time initial design plans are submitted to the CBO for review and approval (the CBSC in effect is the edition that has been adopted by the California Building Standards Commission and published at least 180 days previously). The project owner shall ensure that all the provisions of the above applicable codes are enforced during the construction, addition, alteration, moving, demolition, repair, or maintenance of the completed facility. All transmission facilities (lines, switchyards, switching stations and substations) are covered in the conditions of certification in the <b>Transmission System Engineering</b> section of this document.	Within 30 days following receipt of the certificate of occupancy, the project owner shall submit to the CPM a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation, and inspection requirements of the applicable LORS and the Energy Commission's decision have been met in the area of facility design. The project owner shall provide the CPM a copy of the certificate of occupancy within 30 days of receipt from the CBO.	
In the event that the initial engineering designs are submitted to the CBO when the successor to the 2007 CBSC is in effect, the 2007 CBSC provisions shall be replaced with the applicable successor provisions. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.  The project owner shall ensure that all contracts with contractors, subcontractors, and suppliers clearly specify that all work performed and materials supplied comply with the codes listed above.	Once the certificate of occupancy has been issued, the project owner shall inform the CPM at least 30 days prior to any construction, addition, alteration, moving, demolition, repair, or maintenance to be performed on any portion(s) of the completed facility that requires CBO approval for compliance with the above codes. The CPM will then determine if the CBO needs to approve the work.	
<b>GEN-2</b> Before submitting the initial engineering designs for CBO review, the project owner shall furnish the CPM and the CBO with a schedule of facility design submittals, and master drawing and master specifications lists. The schedule shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM upon request.	At least 60 days (or a project owner- and CBO-approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the master drawing and master specifications lists of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in Facility Design Table 2, below. Major structures and equipment shall be added to or deleted from the table only with CPM approval. The project owner shall provide schedule updates in the monthly compliance report.	

dition of Certification	Verification	Re Ag	
LITY DESIGN (cont.)			
	Facility Design Table 2 Major Structures and Equipment List	Facility Design Table 2 Major Structures and Equipment List	
	Equipment/System Quantity (Plant)		
	Steam Turbine Generator Foundation and Connections 2		
	Start-up Boilers Foundations and Connections 2		
	Generator Step-up Transformer Foundation and Connections 2		
	Unit Auxiliary Transformer Foundation and Connections 2		
	Station Service Transformer Foundation and Connections 6		
	Surface Condenser Foundation and Connections 2		
	Cooling Tower Chemical Feed/Storage Area Structure, 2 Foundation and Connections		
	Cooling Tower Electrical Enclosure Structure, Foundation and 2 Connections		
	Cooling Tower Structure, Foundation and Connections		
	Raw/Fire Tank Structure, Foundation and Connections 2		
	Demineralized Water Tank and Pump Skid Structure, Foundation and Connections 2		
	Control Room/Warehouse Building 2 Structure, Foundation and		

Condition of Certification	Verific	cation		Responsib Agency			
FACILITY DESIGN (cont.)							
	Col	onnections					
		ater Treatment Area Structure, pundation and Connections	2				
	De: Fou	eaerator/Storage Tank Structure, bundation and Connections	2				
		edwater Heaters Foundation and Connections	2				
		and Steam Condenser oundation and Connections	2				
		conomizers Foundation and onnections	10				
		e-heaters Foundation and onnections	8				
	Eva Coi	raporators Foundation and onnections	8				
		uperheaters Foundation and onnections	4				
	Exp Fou	cpansion Tanks Structure, oundation and Connections	2 Lots				
		owdown Tanks Structure, oundation and Connections	2				
	Aux Coi	uxiliary Boiler Foundation and onnections	2				
		enerator Circuit Breaker oundation and Connections	2				
	Stro	ain Electrical Enclosure ructure, Foundation and onnections	2				
	Ulla	lage System Area Foundation Id Connections	2				
	Wa	aste Water Tank Structure,	2				

Condition of Certification		Ve	erification		Responsible Agency	
FACILITY DESIGN (cont.)						
			Foundation and Connections			
			Closed Cooling Water Heat Exchanger Foundation and Connections	4		
			Fire Pump House Structure, Foundation and Connections	2		
			Fire Protection Sprinkler House Structure, Foundation and Connections	6		
			Start Diesel Generator Foundation and Connections	2		
			Above Ground Diesel Fuel Storage Tank Structure, Foundation and Connections	2		
			Excitation Transformer Foundation and Connections	2		
			Turbine Area Flash Tank Structure, Foundation and Connections	2		
			Lube Oil and EHC Skid Structure, Foundation and Connections	2		
			Oil/Water Separator Foundation and Connections	2		
			Closed Cooling Water Expansion Tank Structure, Foundation and Connections	2		
			Nitrogen Bulk Storage and Vaporizer Structure, Foundation and Connections	2		
			Emergency Diesel Generator Foundation and Connections	2		
			Pipe Racks	1 Lot		

Condition of Certification		erification	Responsible Agency	
FACILITY DESIGN (cont.)				
		Pumps Skid Structure, Foundation and Connections	1 Lot	
		Solar Field Reflectors and Receivers Foundations and Connections	1 Lot	
		Drainage Systems (including sanitary drain and waste)	1 Lot	
		High Pressure and Large Diameter Piping and Pipe Racks	1 Lot	
		HVAC and Refrigeration Systems	1 Lot	
		Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot	
		Building Energy Conservation Systems	1 Lot	
		Substation, Switchboards, Transformers, Buses and Towers	1 Lot	
		Electrical Cables/Duct Banks	1 Lot	
		Prefabricated Assemblies	1 Lot	
<b>GEN-3</b> The project owner shall make payments to the CBO for design review, plan checks, and construction inspections, based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. These fees may be consistent with the fees listed in the 2007 CBC, adjusted for inflation and other appropriate adjustments; may be based on the value of the facilities reviewed; may be based on hourly rates; or may be otherwise agreed upon by the project owner and the CBO.	the the sh	ne project owner shall make the require cBO in accordance with the agreem e project owner and the CBO. The program all send a copy of the CBO's receipt of e CPM in the next monthly compliance dicating that applicable fees have beer	ent between ject owner f payment to report	
<b>GEN-4</b> Prior to the start of rough grading, the project owner shall assign a California- registered architect, or a structural or civil engineer, as the resident engineer (RE) in charge of the project. All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in the conditions of certification in the <b>Transmission System Engineering</b> section of this document.	alt gra rev	least 30 days (or project owner- and 0 ternative time frame) prior to the start of ading, the project owner shall submit to the ward approval, the resume and rejumber of the RE and any other delegates.	of rough the CBO for gistration	
The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project, respectively. A project may be divided into parts, provided that each part is clearly defined as a distinct unit. Separate assignments of	as	signed to the project. The project own e CPM of the CBO's approvals of the R	er shall notify	

Con	ndition of Certification	Verification	Responsible Agency
FAC	CILITY DESIGN (cont.)		
gen	eral responsibility may be made for each designated part.	delegated engineer(s) within five days of the approval.	
The	RE shall:	If the RE or the delegated engineer(s) is subsequently	
1.	Monitor progress of construction work requiring CBO design review and inspection to ensure compliance with LORS;	and approval. The project owner shall notify the CPM	
2.	Ensure that construction of all facilities subject to CBO design review and inspection conforms in every material respect to applicable LORS, these conditions of certification, approved plans, and specifications;		
3.	Prepare documents to initiate changes in approved drawings and specifications when either directed by the project owner or as required by the conditions of the project;	of the CBO's approval of the new engineer within five days of the approval.	
4.	Be responsible for providing project inspectors and testing agencies with complete and up-to-date sets of stamped drawings, plans, specifications, and any other required documents;		
5.	Be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, the contractor, and other engineers who have been delegated responsibility for portions of the project; and		
6.	Be responsible for notifying the CBO of corrective action or the disposition of items noted on laboratory reports or other tests when they do not conform to approved plans and specifications.		
	resident engineer (or his delegate) must be located at the project site, or be available at the project site within a sonable period of time, during any hours in which construction takes place.		
	RE shall have the authority to halt construction and to require changes or remedial work if the work does not meet uirements.		
regi	e RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications and stration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the M of the CBO's approval of the new engineer.		
registhe assistructure supposed Calinate Cartinate as lost ructures as los	Prior to the start of rough grading, the project owner shall assign at least one of each of the following California stered engineers to the project: a civil engineer; a soils, geotechnical, or civil engineer experienced and knowledgeable in practice of soils engineering; and an engineering geologist. Prior to the start of construction, the project owner shall gn at least one of each of the following California registered engineers to the project: a design engineer who is either a ctural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment ports; a mechanical engineer; and an electrical engineer. (California Business and Professions Code section 6704 et, and sections 6730, 6731 and 6736 require state registration to practice as a civil engineer or structural engineer in fornia). All transmission facilities (lines, switchyards, switching stations, and substations) are handled in the conditions of ification in the <b>Transmission System Engineering</b> section of this document.  Itasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers, ong as each engineer is responsible for a particular segment of the project (for example, proposed earthwork, civil ctures, power plant structures, equipment support). No segment of the project shall have more than one responsible ineer. The transmission line may be the responsibility of a separate California registered electrical engineer.	At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible civil engineer, soils (geotechnical) engineer and engineering geologist assigned to the project.  At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of construction, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible design engineer, mechanical engineer, and electrical engineer assigned to the project.	

CONDITIONS OF CERTIFICATION				
Con	ditio	n of Certification	Verification	Responsible Agency
FAC	ILITY	DESIGN (cont.)		
		ct owner shall submit, to the CBO for review and approval, the names, qualifications, and registration numbers of all ole engineers assigned to the project.	The project owner shall notify the CPM of the CBO's approvals of the responsible engineers within five days	
he r	ame	of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit , qualifications and registration number of the newly assigned responsible engineer to the CBO for review and The project owner shall notify the CPM of the CBO's approval of the new engineer.	of the approval.  If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five	
۹.	The	e civil engineer shall:	days in which to submit the resume and registration number of the newly assigned engineer to the CBO for	
	1.	Review the foundation investigations, geotechnical, or soils reports prepared by the soils engineer, the geotechnical engineer, or by a civil engineer experienced and knowledgeable in the practice of soils engineering;	review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within	
	2.	Design (or be responsible for the design of), stamp, and sign all plans, calculations, and specifications for proposed site work, civil works, and related facilities requiring design review and inspection by the CBO. At a minimum, these include: grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads and sanitary sewer systems; and	five days of the approval.	
	3.	Provide consultation to the RE during the construction phase of the project and recommend changes in the design of the civil works facilities and changes to the construction procedures.		
3.		e soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils jineering, shall:		
	1.	Review all the engineering geology reports;		
	2.	Prepare the foundation investigations, geotechnical, or soils reports containing field exploration reports, laboratory tests, and engineering analysis detailing the nature and extent of the soils that could be susceptible to liquefaction, rapid settlement or collapse when saturated under load;		
	3.	Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with requirements set forth in the 2007 CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both); and		
	4.	Recommend field changes to the civil engineer and RE.		
		This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform to the predicted conditions used as the basis for design of earthwork or foundations.		
<b>)</b> .	The	engineering geologist shall:		
	1.	Review all the engineering geology reports and prepare a final soils grading report; and		
	2.	Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 2007 CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both).		

Con	dition of Certification	Verification	Responsible Agency
FAC	ILITY DESIGN (cont.)		
D.	The design engineer shall:		
	1. Be directly responsible for the design of the proposed structures and equipment supports;		
	2. Provide consultation to the RE during design and construction of the project;		
	3. Monitor construction progress to ensure compliance with engineering LORS;		
	4. Evaluate and recommend necessary changes in design; and		
	5. Prepare and sign all major building plans, specifications, and calculations.		
E.	The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the CBO, stating that the proposed final design plans, specifications, and calculations conform to all of the mechanical engineering design requirements set forth in the Energy Commission's decision.		
F.	The electrical engineer shall:		
	1. Be responsible for the electrical design of the project; and		
Sigr	and stamp electrical design drawings, plans, specifications, and calculations.		
shal requ	-6 Prior to the start of an activity requiring special inspection, including prefabricated assemblies, the project owner assign to the project, qualified and certified special inspector(s) who shall be responsible for the special inspections ired by the 2007 CBC. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in litions of certification in the Transmission System Engineering section of this document.	At least 15 days (or project owner- and CBO-approved alternative time frame) prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s), or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner	
Eng	rtified weld inspector, certified by the American Welding Society (AWS), and/or American Society of Mechanical neers (ASME) as applicable, shall inspect welding performed on-site requiring special inspection (including structural, g, tanks and pressure vessels).		
The	special inspector shall:	shall also submit to the CPM a copy of the CBO's	
1.	Be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous inspection;	approval of the qualifications of all special inspectors in the next monthly compliance report.	
2.	Inspect the work assigned for conformance with the approved design drawings and specifications;	If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to	
3.	Furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction, then, if uncorrected, to the CBO and the CPM for corrective action; and	submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.	
4.	Submit a final signed report to the RE, CBO, and CPM, stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans, specifications, and other provisions of the applicable edition of the CBC.		

Condition of Certification	Verification	Responsible Agency
FACILITY DESIGN (cont.)		
<b>GEN-7</b> If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend required corrective actions. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this condition of certification and, if appropriate, applicable sections of the CBC and/or other LORS.	The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next monthly compliance report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action to obtain CBO's approval.	
<b>GEN-8</b> The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project owner shall request the CBO to inspect the completed structure and review the submitted documents. The project owner shall notify the CPM after obtaining the CBO's final approval. The project owner shall retain one set of approved engineering plans, specifications, and calculations (including all approved changes) at the project site or at another accessible location during the operating life of the project. Electronic copies of the approved plans, specifications, calculations, and marked-up as-builts shall be provided to the CBO for retention by the CPM.	Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM, in the next monthly compliance report, (a) a written notice that the completed work is ready for final inspection, and (b) a signed statement that the work conforms to the final approved plans. After storing the final approved engineering plans, specifications, and calculations described above, the project owner shall submit to the CPM a letter stating both that the above documents have been stored and the storage location of those documents.	
	Within 90 days of the completion of construction, the project owner shall provide to the CBO three sets of electronic copies of the above documents at the project owner's expense. These are to be provided in the form of "read only" (Adobe pdf 6.0) files, with restricted (password-protected) printing privileges, on archive quality compact discs.	
<ol> <li>CIVIL-1 The project owner shall submit to the CBO for review and approval the following:</li> <li>Design of the proposed drainage structures and the grading plan;</li> <li>An erosion and sedimentation control plan;</li> <li>Related calculations and specifications, signed and stamped by the responsible civil engineer; and</li> <li>Soils, geotechnical, or foundation investigations reports required by the 2007 CBC.</li> </ol>	At least 15 days (or project owner- and CBO-approved alternative time frame) prior to the start of site grading the project owner shall submit the documents described above to the CBO for design review and approval. In the next monthly compliance report following the CBO's approval, the project owner shall submit a written statement certifying that the documents have been approved by the CBO.	

Condition of Certification	Verification	Responsible Agency
FACILITY DESIGN (cont.)		
<b>CIVIL-2</b> The resident engineer shall, if appropriate, stop all earthwork and construction in the affected areas when the responsible soils engineer, geotechnical engineer, or the civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications, and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area.	The project owner shall notify the CPM within 24 hours, when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within 24 hours of the CBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the CBO's approval.	
<b>CIVIL-3</b> The project owner shall perform inspections in accordance with the 2007 CBC. All plant site-grading operations, for which a grading permit is required, shall be subject to inspection by the CBO.  If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report, with copies to the CBO and the CPM, detailing all discrepancies, non-compliance items, and the proposed corrective action.	Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a non-conformance report (NCR), and the proposed corrective action for review and approval. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs, for the reporting month, shall also be included in the following monthly compliance report.	
CIVIL-4 After completion of finished grading and erosion and sedimentation control and drainage work, the project owner shall obtain the CBO's approval of the final grading plans (including final changes) for the erosion and sedimentation control work. The civil engineer shall state that the work within his/her area of responsibility was done in accordance with the final approved plans.	Within 30 days (or project owner- and CBO-approved alternative time frame) of the completion of the erosion and sediment control mitigation and drainage work, the project owner shall submit to the CBO, for review and approval, the final grading plans (including final changes) and the responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes, along with a copy of the transmittal letter to the CPM. The project owner shall submit a copy of the CBO's approval to the CPM in the next monthly compliance report.	
STRUC-1 Prior to the start of any increment of construction of any major structure or component listed in Facility Design Table 2 of condition of certification GEN-2, above, the project owner shall submit to the CBO for design review and approval the proposed lateral force procedures for project structures and the applicable designs, plans and drawings for project structures. Proposed lateral force procedures, designs, plans and drawings shall be those for the following items (from Table 2, above):  1. Major project structures;	At least 60 days (or project owner- and CBO-approved alternative time frame) prior to the start of any increment of construction of any structure or component listed in <b>Facility Design Table 2</b> of condition of certification <b>GEN-2</b> , above, the project owner shall submit to the CBO the above final design plans, specifications and calculations, with a copy of	

Cor	ndition of Certification	Verification	Responsible Agency
FAC	CILITY DESIGN (cont.)		
emp	quality control procedures. If there are conflicting requirements, the more stringent shall govern (for example, highest loads, or lowest allowable stresses shall govern). All plans, calculations, and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations, and specifications;  Submit to the CBO the required number of copies of the structural plans, specifications, calculations, and other required documents of the designated major structures prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation;	the transmittal letter to the CPM.  The project owner shall submit to the CPM, in the next monthly compliance report, a copy of a statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and comply with the requirements set forth in applicable engineering LORS.	
	RUC-2 The project owner shall submit to the CBO the required number of sets of the following documents related to work that has undergone CBO design review and approval:  Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);  Concrete pour sign-off sheets;  Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);  Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and Reports covering other structural activities requiring special inspections shall be in accordance with the 2007 CBC.	If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the discrepancies and the proposed corrective action to the CBO, with a copy of the transmittal letter to the CPM. The NCR shall reference the condition(s) of certification and the applicable CBC chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.  The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action to obtain CBO's approval.	

Condition of Certification	Verification	Responsible Agency
FACILITY DESIGN (cont.)		
<b>STRUC-3</b> The project owner shall submit to the CBO design changes to the final plans required by the 2007 CBC, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes, and shall give to the CBO prior notice of the intended filing.	On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the monthly compliance report, when the CBO has approved the revised plans.	
STRUC-4 Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in the 2007 CBC shall, at a minimum, be designed to comply with the requirements of that chapter.	At least 30 days (or project owner- and CBO-approved alternate time frame) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design review and approval final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification.  The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following monthly compliance report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the monthly compliance report following completion of any inspection.	
MECH-1 The project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations for each plant major piping and plumbing system listed in Facility Design Table 2, condition of certification GEN-2, above. Physical layout drawings and drawings not related to code compliance and life safety need not be submitted. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of that construction.  The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major piping and plumbing systems, subject to CBO design review and approval, and submit a signed statement to the CBO when the proposed piping and plumbing systems have been designed, fabricated, and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards, which may include, but are not limited to:	At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of any increment of major piping or plumbing construction listed in Facility Design Table 2, condition of certification GEN-2, above, the project owner shall submit to the CBO for design review and approval the final plans, specifications, and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with applicable LORS, and shall	
American National Standards Institute (ANSI) B31.1 (Power Piping Code);	send the CPM a copy of the transmittal letter in the next monthly compliance report.	
ANSI B31.2 (Fuel Gas Piping Code);	The project owner shall transmit to the CPM, in the	
ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);	monthly compliance report following completion of any inspection, a copy of the transmittal letter conveying	

Condition of Certification	Verification	Responsible Agency
FACILITY DESIGN (cont.)		
ANSI B31.8 (Gas Transmission and Distribution Piping Code);	the CBO's inspection approvals.	
Title 24, California Code of Regulations, Part 5 (California Plumbing Code);		
<ul> <li>Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);</li> </ul>		
Title 24, California Code of Regulations, Part 2 (California Building Code); and		
Riverside County codes.		
<ul> <li>The CBO may deputize inspectors to carry out the functions of the code enforcement agency.</li> </ul>		
<ul> <li>MECH-2 For all pressure vessels installed in the plant, the project owner shall submit to the CBO and California Occupational Safety and Health Administration (Cal-OSHA), prior to operation, the code certification papers and other documents required by applicable LORS. Upon completion of the installation of any pressure vessel, the project owner shall request the appropriate CBO and/or Cal-OSHA inspection of that installation.</li> <li>The project owner shall:</li> <li>1. Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated, and installed in accordance with the appropriate section of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and</li> <li>2. Have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications, and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.</li> </ul>		
MECH-3 The project owner shall submit to the CBO for design review and approval the design plans, specifications, calculations, and quality control procedures for any heating, ventilating, air conditioning (HVAC) or refrigeration system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.  The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of that construction. The final plans, specifications and calculations shall include approved criteria, assumptions, and methods used to develop the design. In addition, the responsible mechanical engineer certifying compliance with the CBC and other applicable codes, with a copy of the transmittal letter to the CPM.		
<b>ELEC-1</b> Prior to the start of any increment of electrical construction for all electrical equipment and systems 480 Volts or higher (see a representative list, below), with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit, for CBO design review and approval, the proposed final design, specifications, and calculations. Upon approval, the above listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of the	At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of each increment of electrical construction, the project owner shall submit to the CBO for design review and approval the above listed documents. The project owner shall	

Con	ditior	of Certification	Verification	Responsible Agency
FAC	FACILITY DESIGN (cont.)			
appl	project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in conditions of certification in the <b>Transmission System Engineering</b> section of this document.			
A.	Fina	ll plant design plans shall include:	LORS, and shall send the CPM a copy of the transmittal letter in the next monthly compliance report.	
	1.	one-line diagrams for the 13.8 kV, 4.16 kV and 480 V systems; and	transmittanistism in the most mentary compliance report.	
	2.	system grounding drawings.		
B.	Fina	ll plant calculations must establish:		
	1.	short-circuit ratings of plant equipment;		
	2.	ampacity of feeder cables;		
	3.	voltage drop in feeder cables;		
	4.	system grounding requirements;		
	5.	coordination study calculations for fuses, circuit breakers and protective relay settings for the 13.8 kV, 4.16 kV and 480 V systems;		
	6.	system grounding requirements; and		
	7.	lighting energy calculations.		
C.	The	following activities shall be reported to the CPM in the monthly compliance report:		
	1.	Receipt or delay of major electrical equipment;		
	2.	Testing or energization of major electrical equipment; and		
	3.	A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission decision.		

Condition of Certification	Verification	Responsible Agency
GEOLOGICAL AND PALEONTOLOGICAL RESOURCES		
General conditions of certification with respect to engineering geology are proposed under Conditions of Certification <b>GEN-1</b> , paleontological conditions of certification follow. It is staff's opinion that the likelihood of encountering paleontological resources	GEN-5, and CIVIL-1 in the FACILITY DESIGN section. Pro s is moderate at the plant site.	posed
PAL-1 The project owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its PRS for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the Paleontological Resources Report, the project owner shall obtain CPM approval of the replacement PRS. The project owner shall keep resumes on file for qualified Paleontological Resource Monitors (PRMs). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM.	(1) At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.	CEC/BLM
The PRS resume shall include the names and phone numbers of references. The resume shall also demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the required paleontological resource tasks.	(2) At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project,	
As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontology (SVP) guidelines of 1995. The experience of the PRS shall include the following:	stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are	
1. Institutional affiliations, appropriate credentials, and college degree;	obtained during the project, the PRS shall provide	
2. Ability to recognize and collect fossils in the field;	additional letters and resumes to the CPM. The letter shall be provided to the CPM no later than one week	
3. Local geological and biostratigraphic expertise;	prior to the monitor's beginning on-site duties.	
4. Proficiency in identifying vertebrate and invertebrate fossils; and	(3) Prior to the termination or release of a PRS, the	
5. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.	project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.	
The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems necessary on the project. Paleontological Resource Monitors (PRMs) shall have the equivalent of the following qualifications:		
BS or BA degree in geology or paleontology and one year of experience monitoring in California; or		
AS or AA in geology, paleontology, or biology and four years' experience monitoring in California; or		
Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California.		
PAL-2 The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plants, construction lay down areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner	(1) At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings to the CPM.	CEC/BLM
shall provide copies to the PRS and CPM. The site grading plan and plan and profile drawings for the utility lines would be acceptable for this purpose. The plan drawings should show the location, depth, and extent of all ground disturbances and be at a scale of 1 inch = 40 feet to 1 inch = 100 feet range. If the footprint of the project or its linear facilities change, the project owner shall provide maps and drawings reflecting those changes to the PRS and CPM.	(2) If there are changes to the footprint of the project, revised maps and drawings shall be provided to the{RS CPM at least 15 days prior to the start of ground disturbance.	

Con	dition of Certification	Verification	Responsible Agency
GEO	DLOGICAL AND PALEONTOLOGICAL RESOURCES (cont.)		
pow Befo phas At a	nstruction of the ISEGS project proceeds in phases, maps and drawings may be submitted prior to the start of each er plant. A letter identifying the proposed schedule of each project power plant shall be provided to the PRS, and CPM. For every commences on affected power plants, the project owner shall notify the PRS and CPM of any construction see scheduling changes.  In the project owner shall ensure that the PRS or PRM consults weekly with the project superintendent or struction field manager to confirm area(s) to be worked the following week, and until ground disturbance is completed.	(3) If there are changes to the scheduling of the construction phases of each power plant, the project owner shall submit a letter to BLM's Authorized Officer and the CPM within 5 days of identifying the changes.	
unki own iden PRM mor basi	If after review of the plans provided pursuant to PAL-2, the PRS determines that materials with moderate, high, or nown paleontological sensitivity could be impacted, the project owner shall ensure that the PRS prepares, and the project er submits to the CPM for review and approval, a paleontological resources monitoring and mitigation plan (PRMMP) to tify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the IMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for itoring, collecting, and sampling activities, and may be modified with CPM approval. This document shall be used as the sof discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each itor, the project owner's on-site manager and the CPM.	At least 30 days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. The PRMMP shall include an affidavit of authorship by the PRS, and acceptance of the PRMMP by the project owner evidenced by a signature.	CEC/BLM
	PRMMP shall be developed in accordance with the guidelines of the Society of Vertebrate Paleontology (SVP 1995) and I include, but not be limited, to the following:		
1.	Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre- construction surveys, worker environmental training, fieldwork, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation will be performed according to PRMMP procedures;		
2.	Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and the conditions of certification;		
3.	A thorough discussion of the anticipated geological units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;		
4.	An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained units;		
5.	A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling;		
6.	A discussion of procedures to be followed in the event of a significant fossil discovery, halting construction, resuming construction, and how notifications will be performed;		
7.	A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;		
8.	Procedures for inventory, preparation, and delivery for curation into a retrievable storage collection in a public repository or museum, which meet the Society of Vertebrate Paleontology's standards and requirements for the		

Cor	ndition of Certification	Verification	Responsible Agency
GE	DLOGICAL AND PALEONTOLOGICAL RESOURCES (cont.)		
	curation of paleontological resources;		
9.	Identification of the institution that has agreed to receive data and fossil materials collected, requirements or specifications for materials delivered for curation, and how they will be met, and the name and phone number of the contact person at the institution; and		
10.	A copy of the paleontological conditions of certification.		
unk activ trair who app mer The haz	If after review of the plans provided pursuant to PAL-2, the PRS determines that materials with moderate, high, or nown paleontological sensitivity could be impacted then, prior to ground disturbance and for the duration of construction vities involving ground disturbance, the project owner and the PRS shall prepare and conduct weekly CPM-approved ning for the following workers: project managers, construction supervisors, foremen and general workers involved with or operate ground-disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-roved worker training. Worker training shall consist of an initial in-person PRS training during the project kick-off, for those intioned above. Following initial training, a CPM-approved video or in-person training may be used for new employees. It training program may be combined with other training programs prepared for cultural and biological resources, ardous materials, or other areas of interest or concern. No ground disturbance shall occur prior to CPM approval of the ricker Environmental Awareness Program (WEAP), unless specifically approved by the CPM.	<ul> <li>(1) At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow.</li> <li>(2) At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning to use a video for interim training.</li> <li>(3) If the owner requests an alternate paleontological</li> </ul>	CEC/BLM
	WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance nese resources, and legal obligations to preserve and protect those resources.	trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate	
The	training shall include:	trainers shall not conduct training prior to CPM	
1.	A discussion of applicable laws and penalties under the law;	authorization.	
2.	Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontological sensitivity;	(4) In the monthly compliance report (MCR, the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and	
3.	Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;	the trainer or type of training (in-person or video) offered that month. The MCR shall also include a	
4.	Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;	running total of all persons who have completed the training to date.	
5.	An informational brochure that identifies reporting procedures in the event of a discovery;		
6.	A WEAP certification of completion form signed by each worker indicating that he/she has received the training; and		
7.	A sticker that shall be placed on hard hats indicating that environmental training has been completed.		
both	The project owner shall ensure that the PRS and PRM(s) monitor consistent with the PRMMP all construction-ted grading, excavation, trenching, and augering in areas where potential fossil-bearing materials have been identified, in at the site and along any constructed linear facilities associated with the project. In the event that the PRS determines time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the project her shall notify and seek the concurrence of the CPM.	The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the	CEC/BLM

C	ondition of Certification	Verification	Responsible Agency	
G	GEOLOGICAL AND PALEONTOLOGICAL RESOURCES (cont.)			
re	e project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if paleontological sources are encountered. The project owner shall ensure that there is no interference with monitoring activities unless ected by the PRS. Monitoring activities shall be conducted as follows:	PRMMP. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.		
1.	Any change of monitoring from the accepted schedule in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring and will be included in the monthly compliance report. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.			
2.	The project owner shall ensure that the PRM(s) keep a daily monitoring log of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.			
3.	The project owner shall ensure that the PRS notifies the CPM within 24 hours of the occurrence of any incidents of non-compliance with any paleontological resources conditions of certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the conditions of certification.			
4.	For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM within 24 hours, or Monday morning in the case of a weekend event where construction has been halted because of a paleontological find.			
th de ac ea re pla	the project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities placed in the monthly compliance reports. The summary will include the name(s) of PRS or PRM(s) active during the month, general scriptions of training and monitored construction activities, and general locations of excavations, grading, and other tivities. A section of the report shall include the geological units or subunits encountered, descriptions of samplings within ch unit, and a list of identified fossils. A final section of the report will address any issues or concerns about the project ating to paleontological resource monitoring, including any incidents of non-compliance or any changes to the monitoring and that have been approved by the CPM. If no monitoring took place during the month, the report shall include an planation in the summary as to why monitoring was not conducted.			
pe ar	AL-6 The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately rformed including collection of fossil materials, preparation of fossil materials for analysis, analysis of fossils, identification d inventory of fossils, the preparation of fossils for curation, and the delivery for curation of all significant paleontological source materials encountered and collected during project construction.	The project owner shall maintain in his/her compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. The project owner shall maintain these files for a period of three years after project completion and approval of BLM Authorized Officer- and CPM-approved paleontological resource report (see PAL-7). The project owner shall be responsible for paying any curation fees charged by the museum for fossils collected and curated as a result of paleontological mitigation. A copy of the letter of transmittal submitting the fossils to the curating institution shall be provided to the CPM.	CEC/BLM	

Condition of Certification	Verification	Responsible Agency
GEOLOGICAL AND PALEONTOLOGICAL RESOURCES (cont.)		
<b>PAL-7</b> The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information, and submit it to the CPM for review and approval.  The report shall include, but is not limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated below the level of significance.	Within 90 days after completion of ground-disturbing activities, including landscaping, the project owner shall submit the PRR under confidential cover to the CPM.	CEC/BLM
HAZARDOUS MATERIALS MANAGEMENT		
<b>HAZ-1</b> The project owner shall not use any hazardous materials not listed in Appendix A, below, or in greater quantities or strengths than those identified by chemical name in Appendix A, below, unless approved in advance by the Compliance Project Manager (CPM).	The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility.	CEC/BLM
HAZ-2 The project owner shall concurrently provide a Hazardous Materials Business Plan (HMBP), a Spill Prevention, Control, and Countermeasure Plan (SPCC), and a Process Safety Management Plan (PSMP) to the Riverside County Environmental Health Department (RCEHD) and the CPM for review. After receiving comments from the RCEHD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final HMBP shall then be provided to the RCEHD for information and to the CPM for approval.	At least 60 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final Hazardous Materials Business Plan, a Spill Prevention, Control, and Countermeasure Plan, and a Process Safety Management Plan to the CPM for approval.	CEC/BLM
<b>HAZ-3</b> The project owner shall develop and implement a Safety Management Plan for the delivery and handling of liquid and gaseous hazardous materials. The plan shall include procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of incompatible hazardous materials. This plan shall be applicable during construction, commissioning, and operation of the power plant.	At least sixty (60) days prior to the delivery of any liquid or gaseous hazardous material to the facility, the project owner shall provide a Safety Management Plan as described above to the CPM for review and approval.	CEC/BLM
<b>HAZ-4</b> The project owner shall place an adequate number of isolation valves in the Heat transfer Fluid (HTF) pipe system for section and loop isolation in the event of a fluid leak. These valves shall be actuated either manually or remotely depending on location and function. The engineering design drawings showing the number, location, and type of isolation valves shall be provided to the CPM for review and approval prior to the commencement of the solar array piping construction.	At least thirty (30) days (or less if agreed to by the CPM) prior to the commencement of solar array piping construction, the project owner shall provide the design drawings as described above to the CPM for review and approval.	CEC/BLM

Con	ditio	n of Certification	Verification	Responsible Agency	
HAZARDOUS MATERIALS MANAGEMENT (cont.)					
HAZ-5 Prior to commencing construction, a site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to the CPM for review and approval. The Construction Security Plan shall include the following:		ed and made available to the CPM for review and approval. The Construction Security Plan shall include the	At least thirty (30) days prior to commencing construction, the project owner shall notify the CPM that a site-specific Construction Security Plan is	CEC/BLM	
1.	peri	imeter security consisting of fencing enclosing the construction area;	available for review and approval.		
2.	sec	urity guards;			
3.	site	access control consisting of a check-in procedure or tag system for construction personnel and visitors;			
4.		ten standard procedures for employees, contractors and vendors when encountering suspicious objects or kages on site or off site;			
5.	prof	tocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and			
6.	eva	cuation procedures.			
addr than	ess p that Oper	e available to the CPM for review and approval. The project owner shall implement site security measures that obscious site security and hazardous materials storage. The level of security to be implemented shall not be less described below (as per NERC 2002).  ation Security Plan shall include the following:  manent full perimeter fence or wall, at least eight feet high and topped with barbed wire or the equivalent;	hazardous materials on site, the project owner shall notify the CPM that a site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations		
2.	mai	in entrance security gate, either hand operated or motorized;	have been performed, and that updated certification statements have been appended to the operations		
3.	eva	cuation procedures;	security plan. In the annual compliance report, the		
4.	prof	tocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;	project owner shall include a statement that the operations security plan includes all current hazardous		
5.		ten standard procedures for employees, contractors, and vendors when encountering suspicious objects or kages on site or off site;	materials transport vendor certifications for security plans and employee background investigations.		
	A.	a statement (refer to sample, <b>ATTACHMENT A</b> ), signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to determine the accuracy of employee identity and employment history and shall be conducted in accordance with state and federal laws regarding security and privacy;			
	B.	a statement(s) (refer to sample, <b>ATTACHMENT B</b> ), signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner), that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractors who visit the project site;			
6.	cito	access controls for employees, contractors, vendors, and visitors;			

Cor	dition of Certification	Verification	Responsible Agency
HAZ	ARDOUS MATERIALS MANAGEMENT (cont.)		
7.	a statement(s) (refer to sample, <b>ATTACHMENT C</b> ), signed by the owners or authorized represe materials transport vendors, certifying that they have prepared and implemented security plans i CFR 172.802, and that they have conducted employee background investigations in accordance 1572, subparts A and B;	n compliance with 49	
8.	closed circuit TV (CCTV) monitoring system, recordable, and viewable in the power plant control station (if separate from the control room) with cameras able to pan, tilt, and zoom, have low-light able to view the outside entrance to the control room and the front gate; and,		
9.	additional measures to ensure adequate perimeter security consisting of either:		
	A. security guard(s) present 24 hours per day, 7 days per week; or		
	B. power plant personnel on site 24 hours per day, 7 days per week, and one of the following:		
	<ul> <li>Perimeter breach detectors or</li> </ul>		
	<ul> <li>CCTV able to view both site entrance gates and 100% of the power block area perime</li> </ul>	ter	
sect prot circt prov	project owner shall fully implement the security plans and obtain CPM approval of any substantive rity plans. The CPM may authorize modifications to these measures, or may require additional meactive barriers for critical power plant components— transformers, gas lines, and compressors—domstances unique to the facility or in response to industry-related standards, security concerns, or ided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North Ability Council, after consultation with both appropriate law enforcement agencies and the applicant	easures such as epending upon additional guidance American Electrical	

Condition of Certification	Verification	Responsible Agency			
NOISE					
<b>NOISE-1</b> At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within two miles of the project site boundaries and one-half mile of linears, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project and include that telephone number in the above notice. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.	Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.	CEC/BLM			
<ul> <li>NOISE-2 NOISE COMPLAINT PROCESS. Throughout the construction and operation of Genesis, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The project owner or authorized agent shall:</li> <li>Use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;</li> <li>Attempt to contact the person(s) making the noise complaint within 24 hours;</li> <li>Conduct an investigation to determine the source of noise related to the complaint;</li> <li>Take all feasible measures to reduce the noise at its source if the noise is project related; and</li> <li>Submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts, and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.</li> </ul>	Within five days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a three-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.	CEC/BLM			
<b>NOISE-3</b> The project owner shall submit to the CPM for review and approval a noise control program and a statement, signed by the project owner's project manager, verifying that the noise control program will be implemented throughout construction of the project. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal/OSHA standards.	At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program and the project owner's project manager's signed statement. The project owner shall make the program available to Cal/OSHA upon request.	CEC/BLM			
NOISE-4 Following the project's first achieving a sustained output of 90 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility.  The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations sections 5095–5099 and Title 29, Code of Federal Regulations section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure.  The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.	Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal/OSHA upon request.	CEC/BLM			

Condition of Certification	Verification	Responsible Agency
HEALTH AND SAFETY		
<b>Public Health-1</b> The Project owner shall develop and implement a Cooling Water Management Plan to ensure that the potential for bacterial growth in cooling water is kept to a minimum. The Plan shall be consistent with the Cooling Technology Institute's "Best Practices for Control of Legionella" guidelines.	At least 60 days prior to the commencement of cooling tower operations, the Cooling Water Management Plan shall be provided to the CPM for review and approval.	CEC/BLM

#### SOIL AND WATER RESOURCES

#### **Drainage Erosion and Sedimentation Control Plan (DESCP)**

**SOIL&WATER-1** Prior to site mobilization, the Project owner shall obtain both the and Compliance Project Manager (CPM) approval of the Drainage Erosion and Sedimentation Control Plan (DESCP) for managing stormwater during Project construction and operations as normally administered by the County of Riverside. The DESCP must ensure proper protection of water quality and soil resources, demonstrate no increase in off-site flooding potential, include provisions for sediment and stormwater retention from both the power block, solar fields and transmission right of way to meet any Riverside County requirements, address exposed soil treatments in the solar fields for both road and non-road surfaces, and identify all monitoring and maintenance activities. The DESCP shall contain, at minimum, the elements presented below that outline site management activities and erosion and sediment-control BMPs to be implemented during site mobilization, excavation, construction, and post construction (operating) activities.

- A. Vicinity Map A map(s), at a minimum scale 1 inch=500 feet, shall be provided indicating the location of all Project elements (construction sites, laydown area, pipelines) with depictions of all significant geographic features including swales, storm drains, and sensitive areas.
- B. Site Delineation All areas subject to soil disturbance for the proposed Project (Project phases, laydown area, all linear facilities, landscaping areas, and any other Project elements) shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.
- C. Watercourses and Critical Areas The DESCP shall show the location of all nearby watercourses including swales, storm drains, and drainage ditches. It shall indicate the proximity of those features to the proposed Project construction, laydown, and landscape areas and all transmission and pipeline construction corridors.
  - a. The DESCP shall describe how the project will avoid or minimize impacts to Palen-McCoy Valley sand corridor,
  - All proposed linear features (with the exception of Power Pylons) shall be constructed flush with the surrounding ground surface and without ground level obstructions.
- D. Drainage Map The DESCP shall provide a topographic site map(s), at a minimum scale of 1 inch=200 feet, showing existing, interim, and proposed drainage swales and drainage systems and drainage-area boundaries. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off site for a minimum distance of 100 feet.

No later than thirty (30) days prior to start of site mobilization, the Project owner shall submit a copy of the final DESCP to the CPM for review and comment and to the County of Riverside and the CRBRWQCB if required. The CPM shall consider comments if received by the county and CRBRWQCB before approval of the DESCP.

The DESCP shall be consistent with the grading and drainage plan as required by Condition of Certification CIVIL-1, and relevant portions of the DESCP shall clearly show approval by the chief building official. The Project owner shall provide in the monthly compliance report with a narrative on the effectiveness of the drainage, erosion, and sediment-control measures and the results of monitoring and maintenance activities. Once operational, the Project owner shall update and maintain the DESCP for the life of the Project and shall provide in the annual compliance report information on the results of monitoring and maintenance activities.

CEC/BLM

Con	dition of Certification	Verification	Responsible Agency
SOII	AND WATER RESOURCES (cont.)		
E.	<b>Drainage of Project Site Narrative</b> – The DESCP shall include a narrative of the drainage measures necessary to protect the site and potentially affected soil and water resources within the drainage downstream of the site. The narrative shall include the summary pages from the hydraulic analysis prepared by a professional engineer and erosion control specialist. The narrative shall state the watershed size(s) in acres that was used in the calculation of drainage features.		
F.	Clearing and Grading Plans – The DESCP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography shall be illustrated by tying in proposed contours with existing topography.		
G.	Clearing and Grading Narrative – The DESCP shall include a table with the estimated quantities of material excavated or filled for the site and all Project elements (Project site, laydown area, transmission and pipeline corridors, roadways, and bridges) whether such excavation or fill is temporary or permanent, and the amount of such material to be imported or exported.		
H.	<b>Soil Wind and Water Erosion Control -</b> The plan shall address exposed soil treatments to be used during construction and operation of the proposed Project for both road and non-road surfaces including specifically identifying all chemical based dust palliatives, soil bonding, and weighting agents appropriate for use at the proposed Project site that would not cause adverse effects to vegetation. BMPs shall include measures designed to prevent wind and water erosion including application of chemical dust palliatives after rough grading to limit water use. All dust palliatives, soil binders, and weighting agents shall be approved by the CPM prior to use.		
I.	Best Management Practices Plan – The DESCP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading, Project element excavation and construction, and final grading/stabilization). BMPs shall include measures designed to control dust, stabilize construction access roads and entrances, and control storm water runoff and sediment transport.		
J.	Best Management Practices Narrative – The DESCP shall show the location (as identified in (I) above), timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during all Project element (site, pipelines) excavations and construction, final grading/stabilization, and operation. Separate BMP implementation schedules shall be provided for each Project element for each phase of construction. The maintenance schedule shall include post-construction maintenance of structural-control BMPs, or a statement provided about when such information would be available.		
K.	<b>Project Schedule</b> – The DESCP shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, Project element construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each Project element for each phase of construction.		
L.	<b>Erosion Control Drawings</b> – The erosion-control drawings and narrative shall be designed, stamped and sealed by a professional engineer or erosion control specialist.		

Condition of Certification Verification						
SOIL AND WATER RESOURCES (cont.)						
Ca	ency Comments – The DESCP shall include copies of recommendations, conditions, and provisions from the lifornia Department of Fish and Game (CDFG) and Colorado River Basin Regional Water Quality Control Board RBRWQCB).					
the	onitoring Plan: Monitoring activities shall include routine measurement of the volume of accumulated sediment in e onsite drainage ditches, and storm water diversions. The monitoring plan shall be part of the Channel Monitoring d Maintenance Plan, SOIL&WATER-13.					
Ground	water Level Monitoring, Mitigation, and Reporting		1			
SOIL&WATER-2 The Project owner shall submit a Groundwater Level Monitoring and Reporting Plan to the CPM for review and approval. The Groundwater Level Monitoring and Reporting Plan shall provide detailed methodology for monitoring background and site groundwater levels. Monitoring shall include pre-construction, construction, and Project operation water use. The primary objective for the monitoring is to establish pre-construction and Project related groundwater level trends that can be quantitatively compared against observed and simulated trends near the Project pumping wells and near potentially impacted existing wells.  The Project owner shall:  A. Prior to Project Construction  1. A well reconnaissance shall be conducted to investigate and document the condition of existing water supply wells located within 10 miles of the project site for a wet-cooled project and within 2 miles of the project site for a dry-cooled project, provided that access is granted by the well owners. The reconnaissance will include sending notices by registered mail to all property owners within a 10 mile radius of the project site for a wet-cooled project		<ol> <li>The Project owner shall do all of the following:</li> <li>At least thirty (30) days prior to Project construction, the Project owner shall submit to CPM, a comprehensive report presenting all the data and information required in item A above</li> <li>The Project owner shall submit to the CPM all calculations and assumptions made in development of the report data and interpretations.</li> <li>During Project construction, the Project owner shall submit to the CPM quarterly reports presenting all the data and information requiritiem B above.</li> </ol>	he o.			
2.	and within 2 miles of the project site for a dry-cooled project.  Monitor to establish preconstruction conditions. The monitoring plan and network of monitoring wells will make use of the two test wells and observation wells installed during the Groundwater Resources Investigation completed by the applicant (WPAR, 2010) and any monitoring wells that are installed to comply with Waste Discharge Requirements issued by the RWQCB for the evaporation ponds and land treatment unit associated with the Project. In addition, up to four additional existing wells in the basin that are located up to 10 miles from the Project site (if wet cooling is utilized) or 2 miles (if dry cooling is utilized) will be incorporated into the program, provided access is granted by the owners and that the wells are deemed to be of suitable location and construction to satisfy the requirements for the monitoring program. The off-site wells incorporated in the program will include both shallower wells completed above the pumped interval and deeper wells completed within the pumped interval. The monitoring plan shall also include the identification of any seeps and or springs within one mile of the perimeter of the project site. The seeps and or springs shall be included in the groundwater level monitoring network.	<ol> <li>The Project owner shall submit to the CPM all calculations and assumptions made in development of the report data and interpretations.</li> <li>No later than sixty (60) days after commencing Project operation, the Project owner shall proto to the CPM for review and approval, documentation showing that any mitigation to private well owners during Project construction was satisfied, based on the requirements of the property owner as determined by the CPM.</li> </ol>	g vide n ne			
3.	Collect groundwater levels from the off-site and on-site wells, seeps and or springs to provide initial groundwater levels for both on-site and off-site wells.	6. During Project operation, the Project owner s submit to the CPM, applicable quarterly, sem annual and annual reports presenting all the and information required in item C above.  Quarterly reports shall be submitted to the CF	- data			

		Responsible
Condition of Certification	Verification	Agency

#### SOIL AND WATER RESOURCES (cont.)

4. Map groundwater levels within the CVGB within 10 miles of the site from the groundwater data collected prior to construction. Update trend plots and statistical analyses, as data is available.

#### B. During Construction:

Collect water levels within the monitoring network and seeps and or springs on a quarterly basis throughout the
construction period and at the end of the construction period. In addition, collect continuous water level
measurements from two shallow (water table) wells at the site using recording pressure transducers. Perform
statistical trend analysis for water levels data. Assess the significance of an apparent trend and estimate the
magnitude of that trend. Use pressure transducer data to characterize seasonal and diurnal fluctuations in
groundwater levels.

#### C. During Operation:

- 1. On a quarterly basis for the first year of operation and semi-annually thereafter for the following four years, collect water level measurements from any wells and seeps and or springs identified in the groundwater monitoring program to evaluate operational influence from the Project. In addition, collect continuous water level measurements from two shallow (water table) wells at the site using recording pressure transducers. Quarterly operational parameters (i.e., pumping rate) of the water supply wells shall be monitored. Additionally, quarterly groundwater-use in the eastern CVGB shall be estimated based on available data.
- 2. On an annual basis, perform statistical trend analysis for water levels and comparison to predicted water level declines due to project pumping. Analysis of the significance of an apparent trend shall be determined and the magnitude of that trend estimated. Use the pressure transducer data to characterize seasonal and diurnal fluctuations in groundwater levels. Based on the results of the statistical trend analyses and comparison to predicted water level declines due to Project pumping, the Project owner shall determine the area where the Project pumping has induced a drawdown in the water supply at a level of 5 feet or more below the baseline trend.
- 3. If water levels have been lowered more than 5 feet below pre-site operational trends, and monitoring data provided by the Project owner show these water level changes are different from background trends or influences by other groundwater pumpers and are caused by Project pumping, then the Project owner shall provide mitigation to the well owner(s) if impacted. Mitigation shall be provided to the impacted well owners that experience 5 feet or more of Project-induced drawdown if the CPM's inspection of the well monitoring data confirms the drawdown (or a portion thereof) is the result of Project-related changes to water levels and water level trends relative to measured pre-project water levels, and the well yield or performance has been significantly affected by Project pumping. The type and extent of mitigation shall be determined by the amount of water level decline induced by the Project, the type of impact, and site specific well construction and water use characteristics. If an impact is determined to be caused by drawdown from more than one source, the level of mitigation provided shall be proportional to the amount of drawdown induced by the Project relative to other sources. In order to be eligible, a well owner must provide documentation of the well location and construction, including pump intake depth, and that the well was constructed and usable before Project pumping was initiated. The mitigation of impacts shall be determined as follows:

- thirty (30) days following the end of the quarter. The 4<sup>th</sup> quarter report shall serve as the annual report, and will be provided on January 31 in the following year.
- 7. The Project owner shall submit to the both the CPM all calculations and assumptions made in development of report data and interpretations, calculations, and assumptions used in development of any reports.
- 8. The Project owner shall provide mitigation as described in item 3.c above, if the CPM's inspection of the monitoring information confirms Project-induced changes to water levels and water level trends relative to measured preproject water levels, and well yield has been lowered by Project pumping. The type and extent of mitigation shall be determined by the amount of water level decline and site specific well construction and water use characteristics. The mitigation of impacts will be determined as set forth in item 3.c above.
- 9. If mitigation includes monetary compensation, the Project owner shall provide documentation to the CPM that compensation payments have been made by March 31 of each year of Project operation or, if lump-sum payment are made, payment is made by March 31 following the first year of operation only. Within thirty (30) days after compensation is paid, the Project owner shall submit to the CPM a compliance report describing compensation for increased energy costs necessary to comply with the provisions of this condition.
- 10. After the first five year operational and monitoring period, the Project owner shall submit a 5-year monitoring report to the CPM that submits all monitoring data collected and provides a summary of the findings. The CPM will determine if the water level measurement frequencies

Condition of	Certification	Verification	Responsible Agency
SOIL AND W	ATER RESOURCES (cont.)		
a.	If Project pumping has lowered water levels and increased pumping lifts, increased energy costs shall be calculated. Payment or reimbursement for the increased costs shall be provided at the option of the affected well owner on an annual basis. In the absence of specific electrical use data supplied by the well owner, the Project owner shall use <b>SOIL&amp;WATER-3</b> to calculate increased energy costs.	should be revised or eliminated.	
b.	If groundwater monitoring data indicate Project pumping has lowered water levels below the top of the well screen, and the well yield is shown to have decreased by 10 percent or more of the initial yield, compensation shall be provided for the diagnosis and maintenance to treat and remove encrustation from the well screen. Reimbursement shall be provided at an amount equal to the customary local cost of performing the necessary diagnosis and maintenance for well screen encrustation. Should well yield reductions be reoccurring, the Project owner shall provide payment or reimbursement for either periodic maintenance throughout the life of the Project or, if treatment is anticipated to be required more frequently than every 3-5 years, replacement of the well.		
c.	If Project pumping has lowered water levels to significantly impact well yield so that it can no longer meet its intended purpose, causes the well to go dry, or cause casing collapse, payment or reimbursement of an amount equal to the cost of deepening or replacing the well shall be provided to accommodate these effects. Payment or reimbursement shall be at an amount equal to the customary local cost of deepening the existing well or constructing a new well of comparable design and yield (only deeper). The demand for water, which determines the required well yield, shall be determined on a per well basis using well owner interviews and field verification of property conditions and water requirements compiled as part of the pre-project well reconnaissance. Well yield shall be considered significantly impacted if it is incapable of meeting 110 percent of the well owner's maximum daily demand, dry-season demand, or annual demand – assuming the pre-project well yield documented by the initial well reconnaissance met or exceeded these yield levels. For already low-yielding wells identified prior to Project construction, a reduction due solely to Project pumping of 10 percent or more below the pre-project yield shall be considered a significant impact. The contribution of Project pumping to observed decreases in observed well yield shall be determined by interpretation of the groundwater monitoring data collected and shall take into consideration the effect of other nearby pumping and the condition of the well prior to the commencement of project pumping.		
d.	The Project owner shall notify any owners of the impacted wells within one month of CPM approval of the compensation analysis for increased energy costs.		
e.	Pump lowering – In the event that groundwater is lowered as a result of Project pumping to an extent where pumps are exposed but well screens remain submerged the pumps shall be lowered to maintain production in the well. The Project shall reimburse the impacted well owner for the costs associated with lowering pumps in proportion to the Project's contribution to the lowering of the groundwater table that resulted in the impact.		
f.	Deepening of wells – If the groundwater is lowered enough as a result of Project pumping that well screens and/or pump intakes are exposed, and pump lowering is not an option such affected wells shall be deepened or new wells constructed. The Project shall reimburse the impacted well owner for all costs associated with deepening existing wells or constructing new wells in proportion to the Project's contribution to the lowering of the water table that resulted in the impact.		

Conditio	n of Certification			Ver	ification	Responsible Agency
SOIL AN	SOIL AND WATER RESOURCES (cont.)					
4.	4. After the first five-year operational and monitoring period the CPM shall evaluate the data and determine if the monitoring program water level measurement frequencies should be revised or eliminated. Revision or elimination of any monitoring program elements shall be based on the consistency of the data collected. The determination of whether the monitoring program should be revised or eliminated shall be made by the CPM.					
5.			year monitoring period, the collected data shall be evaluated by the CPM and frequency should be revised or eliminated.			
6.	During the life of the Project studies and other relevant	ct, the Pro data with	oject owner shall provide to the CPM all monitoring reports, complaints, in ten (10) days of being received by the Project owner.			
costs identified as a result of analysis performed in Condition of Certification SOII &WATER-2 the Project owner shall			The Project owner shall do all of the following:  1. No later than thirty (30) days after CPM approval of the well drawdown analysis, the Project owner	CEC/BLM		
	I cost for energy	=	change in lift/total system head x total energy consumption x costs/unit of energy		shall submit to the CPM for review and approval all documentation and calculations describing necessary compensation for energy costs	
Where:	1:ft (ft)				associated with additional lift requirements.	
change in	• •	=	calculated change in water level in the well resulting from project	2.	The Project owner shall submit to the CPM all	
•	em head (ft)	=	elevation head + discharge pressure head		calculations, along with any letters signed by the well owners indicating agreement with the	
elevation	nead (π)	=	difference in elevation between wellhead discharge pressure gauge and water level in well during pumping.		calculations, and the name and phone numbers of those well owners that do not agree with the	
discharge	pressure head (ft)	=	pressure at wellhead discharge gauge (psi) X 2.31		calculations.	
compens	The Project owner shall submit to the CPM for review and approval the documentation showing which well owners must be compensated for increased energy costs and that the proposed amount is sufficient compensation to comply with the provisions of this condition.			Compensation payments shall be made by March 31 of each year of project operation or, if lump-sum payment is selected, payment shall be made by March 31 of the first year of operation only. Within thirty (30) days after compensation is paid, the Project owner shall submit to the CPM a compliance report describing compensation for increased energy costs		
wel	<ul> <li>Any reimbursements (either lump sum or annual) to impacted well owners shall be only to those well owners whose wells were in service within six months of the Commission decision and that experience more than 5 feet of project- induced drawdown.</li> </ul>					
	Project owner shall notify al		of the impacted wells within one month of the CPM approval of the gy costs.		essary to comply with the provisions of this dition.	
• Cor	npensation shall be provided	d on eithe	r a one-time lump-sum basis, or on an annual basis, as described below:			
esti per affe con	mating energy costs that will mission of the impacted well ected by the project. The impa sumption in the form of mete	be incuri owner, the acted weler or reading	provided on an annual basis shall be calculated prospectively for each year by the to provide the additional lift required as a result of the project. With the the Project owner shall provide energy meters for each well or well field all owner to receive compensation must provide documentation of energy is, calculations based on pump characteristics and volumes pumped, or other to year after the first year of operation, the Project owner shall include an			

dition of Certification	Verification	Responsible Agency			
SOIL AND WATER RESOURCES (cont.)					
adjustment for any deviations between projected and actual energy costs for the previous calendar year.					
One-Time Lump-Sum Compensation: Compensation provided on a one-time lump-sum basis shall be based on a well-interference analysis, assuming the maximum projected project-pumping rates for a wet-cooled or dry-cooled project, as applicable. Compensation associated with increased pumping lift for the life of the project shall be estimated as a lump sum payment as follows:					
<ul> <li>The current cost of energy to the affected party considering time of use or tiers of energy cost applicable to the party's billing of electricity from the utility providing electric service, or a reasonable equivalent if the party independently generates their electricity;</li> </ul>					
An annual inflation factor for energy cost of 3 percent; and					
A net present value determination assuming a term of 30 years and a discount rate of 9 percent.					
ect Groundwater Wells, Pre-Well Installation					
L&WATER-4 The Project owner proposes to construct and operate up to two or more onsite groundwater production is that produce water from the CVGB. The Project owner shall ensure that the wells are completed in accordance with all icable state and local water well construction permits (see C.9.9.2) and requirements. Prior to initiation of well struction activities, the Project owner shall submit for review and comment a well construction packet to the County of the end and fees normally required for the county's well permit, with copies to the CPM. The Project shall not construct a or extract and use groundwater until the CPM provides approval to construct and operate the well.  **t-Well Installation**. The Project owner shall provide documentation to the CPM that the well has been properly pleted. In accordance with California's Water Code section 13754, the driller of the well shall submit to the DWR a Well inpletion Report for each well installed. The Project owner shall ensure the Well Completion reports are submitted. The ect owner shall ensure compliance with all county water well standards and requirements for the life of the wells and shall report in the CPM with two (2) copies each of all monitoring or other reports required for compliance with the County of the erside water well standards and operation requirements, as well as any changes made to the operation of the well.	<ul> <li>The Project owner shall do all of the following:</li> <li>A. No later than sixty (60) days prior to the construction of the onsite groundwater production wells, the Project owner shall submit to the CPM a copy of the water well construction packet submitted to the County of Riverside.</li> <li>B. No later than thirty (30) days prior to the construction of the onsite groundwater production wells, the Project owner shall submit a copy of written concurrence received from the County of Riverside that the proposed well construction activities comply with all county well requirements and meet the requirements established by the county's water well permit program.</li> <li>C. No later than sixty (60) days after installation of each well at the Project site, the Project owner shall ensure that the well driller submits a Well Completion Report to the DWR with a copy provided to the CPM. The Project owner shall submit to the CPM, together with the Well Completion Report, a copy of well drilling logs,</li> </ul>	CEC/BLM			

Condition of Certification	Verification	Responsible Agency			
SOIL AND WATER RESOURCES (cont.)					
	(2) copies each to the CPM of any proposed well construction or operation permit changes within ten (10) days of submittal to or receipt from the County of Riverside.				
	E. No later than fifteen (15) days after completion of the onsite groundwater production wells (including closure of any associated mud pits), the Project owner shall submit documentation to the CPM, and the CRBRWQCB that well drilling activities were conducted in compliance with Title 23, California Code of Regulations, Chapter 15, Discharges of Hazardous Wastes to Land, (23 CCR, sections 2510 et seq.) requirements and that any onsite drilling sumps used for Project drilling activities were removed in compliance with 23 CCR section 2511(c).				
Construction and Operation Water Use					
SOIL&WATER-5 The Project owner proposes to use groundwater for water supply during construction and during operation. The proposed Project's use of groundwater during construction shall not exceed an annual average of 1,368 afy during the entire construction period and an annual average of 1,605 afy during operation for wet cooling and 202 afy for dry cooling. Water quality used for project construction and operation will be reported in accordance with Condition of Certification SOIL&WATER-20 to ensure compliance with this condition.	At least thirty (30) days prior to the start of construction of the proposed Project, the Project owner shall submit to the CPM a copy of evidence that metering devices have been installed and are operational.	CEC/BLM			
Prior to the use of groundwater for construction, the Project owner shall install and maintain metering devices as part of the water supply and distribution system to document Project water use and to monitor and record in gallons per day the total volume(s) of water supplied to the Project from this water source. The metering devices shall be operational for the life of the Project.	Beginning six (6) months after the start of construction, the Project owner shall prepare a semi-annual summary of amount of water used for construction purposes. The summary shall include the monthly range and monthly average of daily water usage in gallons per day.				
	The Project owner shall prepare an annual summary, which will include monthly range and monthly average of water usage in gallons per month, and total water used on an annual basis in acre-feet. For years subsequent to the initial year of operation, the annual summary will also include the yearly range and yearly average water use by source. For calculating the total water use, the term "year" will correspond to the date established for the annual compliance report submittal.				

Condition of Certification	Verification	Responsible Agency
SOIL AND WATER RESOURCES (cont.)		
Naste Discharge Requirements		
SOIL&WATER-6: The Project owner shall comply with the requirements specified in Appendix B, C, and D. These requirements relate to discharges, or potential discharges, of waste that could affect the quality of waters of the state, and were developed in consultation with staff of the State Water Resources Control Board and/or the applicable California Regional Water Quality Control Board (hereafter "Water Boards"). It is the Commission's intent that these requirements be enforceable by both the Commission and the Water Boards. In furtherance of that objective, the Commission hereby delegates the enforcement of these requirements, and associated monitoring, inspection and annual fee collection authority, of the Water Boards. Accordingly, the Commission and the Water Board shall confer with each other and coordinate, as needed, in the enforcement of the requirements. The Project owner shall pay the annual waste discharge permit fee associated with this facility to the Water Boards. In addition, the Water Boards may "prescribe" these requirements as waste discharge requirements pursuant to Water Code Section 13263 solely for the purposes of enforcement, monitoring, inspection, and the assessment of annual fees, consistent with Public Resources Code Section 25531, subdivision (c).	No later than sixty (60) days prior to any waste discharge or use of land treatment units, the Project owner shall provide documentation to the CPM, with copies to the CRBWQCB, demonstrating compliance with the WDRs established in Appendices B, C, and D. Any changes to the design, construction, or operation of the evaporation basins, treatment units, or associated storm water system shall be requested in writing to the CPM, with copies to the CRBWQCB, and approved by the CPM, in consultation with the CRBWQCB, prior to initiation of any changes. The Project owner shall provide to the CPM, with copies to the CRBWQCB, all monitoring reports required by the WDRs, and fully explain any violations, exceedances, enforcement actions, or corrective actions related to construction or operation of the evaporation basins, treatment units, or storm water system.	CEC/BLM
Septic System and Leach Field Requirements		
SOIL&WATER-7 The Project owner shall comply with the requirements of the County of Riverside Ordinance Code Title 8, Chapter 8.124 and the California Plumbing Code (California Code of Regulations Title 24, Part 5) regarding sanitary waste disposal facilities such as septic systems and leach fields. The septic system and leach fields shall be designed, operated, and maintained in a manner that ensures no deleterious impact to groundwater or surface water. Compliance shall include an engineering report on the septic system and leach field design, operation, maintenance, and loading impact to groundwater.	The Project owner shall submit all necessary information and the appropriate fee to the County of Riverside to ensure that the project has complied with county sanitary waste disposal facilities requirements. Written assessments prepared by the County of Riverside regarding the project's compliance with these requirements must be submitted to the CPM for review and approval thirty (30) days prior to the start of power plant operation.	CEC/BLM
Revised Project Drainage Report and Plans	,	
SOIL&WATER-8 The Project owner shall provide a revised Drainage Report which includes the following additional information:  A. Calculations for all the collector/conveyance channels and onsite drainage channels showing adequate depth and non-	The Project owner shall submit a Revised Project Drainage Report with the 30 percent Grading and Drainage Plans to the CPM for their review and comments a minimum of sixty (60) days before project	CEC/BLM

Con	Condition of Certification Verification Res					
SOIL AND WATER RESOURCES (cont.)						
В.	Detailed scour calculations to justify toe-down depths for all soil cement segments, drop structures, slope protection, and any other features where scour is an issue.	provided by the CPM until approval of the report is issued. All comments and concepts presented in the				
C.	Post development onsite drainage maps, calculations and discussion which include a delineation of all onsite watersheds with basin areas, points of concentration, and peak discharge values where the smaller onsite channels discharge into the larger collector and conveyance channels. The maps should also show peak flow values at all downstream points of discharge from the Project.	approved Revised Project Drainage Report with the 30 percent Grading and Drainage Plans will be included in the final Grading and Drainage Plans.				
D.	A discussion and associated calculations documenting the methods to be used for erosion control at outlet locations along the southern property boundary where flow is released to existing ground.					
E.	A specific discussion of how the proposed onsite drainage design will protect the facility from erosion and the possible failure of the facilities resulting in a release of HTF.					
F.	Stage-discharge rating calculations for all outlet structures (i.e. pipes and weirs) used to outlet water along the southern project boundary.					
G.	Digital copies of all hydrologic and hydraulic analysis.					
	Project owner shall also provide the 30 percent Grading and Drainage Plans which include the design based on mation provided in the revised Drainage Report outlined above.					
DET	AILED FLO-2D ANALYSIS					
cond grou disch requi Colo	<b>L&amp;WATER-9</b> The Project owner shall provide a revised FLO-2D analysis which models the post-development flood litions for the 10-, 25- and 100-year storm events along the southern project boundary where flow is released to existing nd. The post-development model must include all outlet structure in the model with appropriate elevations and stagenarge data. The methods and results of the analysis must be fully documented in the revised Project Drainage Report ired in <b>SOIL&amp;WATER-8</b> . Graphical output must include depth and velocity mapping for the post-development condition. It is shading schemes used for the mapping must be consistent between all maps as well as clear and easily differentiated reen designated intervals for hydraulic parameters. Intervals to be used in the mapping are as follows:	The Project owner shall submit a detailed FLO-2D analysis to the CPM for their review and comments with the 30 percent Grading and Drainage Plans and revised Project Drainage Report required in SOIL&WATER-8. The Project owner will address comments provided by the CPM until approval of the analysis is issued.	CEC/BLM			
•	Flow Depth: at 0.20 ft intervals up to 1 ft, and 0.40 ft intervals thereafter.					
•	Velocity: 0.5 feet per second (ft/s) intervals					
extei indic	t of figures will be provided for the 10-, 25- and 100-year events at a scale of no less than 1 in=200 ft which show the nt, depths and velocities of flows being discharged along the southern property boundary, as well as annotation ating the location and type of outlet structure. Digital input and output files associated with the FLO-2D analysis must be ded with all submittals.					
whic	results of this analysis will be used to ensure a design where flow is released from the southern channel in a manner h reasonably mimics existing conditions with respect to flow depth and velocity, and does not result in erosion instream of the facility.					

Con	dition of Certification	Verification	Responsible Agency		
SOII	AND WATER RESOURCES (cont.)				
Drai	nage Channel Design				
Confi be d to m resu aded	OIL&WATER-10 All collector and conveyance channels shall be constructed consistent with Riverside County Flood ontrol and Water Conservation District (RCFCWCD) guidelines where applicable. Deviation from those guidelines should be documented in the Project drainage report along with justification. Grade control structures shall be utilized where needed meet channel velocity and Froude number requirements. Channels shall be sized along discreet sections based on the issults of the detailed FLO-2D analysis described in SOIL&WATER-9. All grade control and drop structures shall have dequate toe-down to account for the design drop plus two additional feet to account for potential downcutting of the channel soil.  SOIL&WATER-8 and FLO 2D Analysis in SOIL&WATER-9. The Project owner will update and				
shov	nnel confluence design must be given special consideration, especially as the preliminary Grading and Drainage Plans v 90 degree angles of confluence at nearly all locations. The issues of confluence hydraulics and potential scour shall be iffically addressed in the revised Drainage Report.	modify the design as necessary to obtain CPM approval.			
also	te flows shall discharge directly into collector channels following the natural drainage patterns. The Project owner shall flatten constructed channel side slopes at a 4:1 ratio at all locations where adequate space exists and in no cases are es to be steeper than 3:1along reaches requiring soil cement. At slopes of 3:1, soil cement shall be placed in horizontal				
	proposed collector channel design must be fully documented in the Grading and Drainage plans and must include the wing information:				
A.	Detailed and accurate cut/fill lines demonstrating in plan view how the channel would tie into existing grade and the solar facility.				
B.	Channel cross-sections at 200-foot intervals or any major changes in channel configuration showing the channel geometry, existing grade, proposed grade at the facility and how the channel would tie in at on both sides.				
C.	Detailed channel profiles showing existing and finished grades at channel flow line and left and right banks. All drop structures as well as the toe-of soil cement profile must also be shown and fully annotated. The 100-year water surface elevation will be provided on all profiles.				
D.	Typical sections and design details for all discreet channel sections, drop structures, channel confluences, flow dispersion structures and other relevant drainage features.				
E.	Details for all outlet structures to be used along the downstream property boundary to release flow from the engineered channels to existing ground as well as details and specifications for all erosion protection measures to be used at those locations.				
F.	Consistent nomenclature and stationing on all plans, sections, profiles and details.				

	CONDITIONS OF CERTIFICATION					
Con	dition of Certification	Verification	Responsible Agency			
SOII	AND WATER RESOURCES (cont.)					
Channel Erosion Protection						
item	<b>L&amp;WATER–11</b> The Project owner must provide revised preliminary Grading and Drainage Plans which incorporate the s and information as listed below for the channels designated as A, B, C, D, E, B/C, D/E on the Conceptual Grading s (GSEP 2010a).	The required information and criteria shall be incorporated into the Grading and Drainage Plans and with all subsequent submittals as required in SOIL&WATER-8 through SOIL&WATER-10. The drainage report associated with the linears identified in "I" above may be submitted separately from the site Grading and Drainage Plans. The Project owner will update and modify the design as necessary to obtain	CEC/BLM			
A.	Soil cement bank protection must be provided such that the channels are protected from bank erosion and lateral headcutting. The extents of the proposed bank protection must be shown on the revised Grading and Drainage Plans. Typical sections for these channels must show the layout of the bank protection including thickness, width and toedown location and depth consistent with the scour calculation provided in the revised Drainage Report.					
В.	Soil cement bank protection shall be provided on both channel banks wherever 10-year channel flow velocity exceeds 5 ft/s. It shall be provided on the outer channel bank wherever offsite topography and a detailed FLO-2D analysis indicate surface flow would enter the collector channels.	CPM approval.				
C.	Soil cement bank protection shall be provided at all channel confluences of otherwise unlined channels where the result of the detailed hydraulic analysis presented in the revised Drainage Report indicate the increased potential for erosion due to adverse angles of confluence. Detailed plans for each confluence showing the extents of the soil cement based on specific hydraulic conditions shall be provided in the formal Grading and Drainage Plans.					
D.	Other methods of channel stabilization, such as dumped riprap or gabions, will not be permitted. Bio-stabilization measures are not permitted.					
E.	Earthen berms used on the outside of collector channels to guide flow to discreet points of discharge into a channel shall not be utilized in lieu of soil cement on the outside bank of collector channels. Offsite flows shall discharge directly into collector channels.					
F.	The plans shall include reference to regionally accepted specifications for soil cement production and construction. A copy of the specification must be submitted with the revised plans.					
G.	A soils report indicating the suitability of the Project soils for use in the production of soil cement to the Project specifications shall be submitted with the revised Grading and Drainage Plans.					
H.	The bottom of engineered collector channels may be left earthen or fully lined at the discretion of the engineer. Fully lined channels will have higher allowable velocities and Froude numbers assuming hydraulic jumps are modeled and considered in the channel design.					
I.	If modifications to the existing drainages to allow construction of and future access to linear facilities require stabilization of the channel in the vicinity of those modifications, location of disturbance to the existing drainages shall be stabilized consistent with best engineering practice to eliminate future negative impacts to those drainages upstream and downstream of the linear facility in the form of downcutting, erosion and headcutting. The use of "non-engineered" culvert crossings shall not be allowed. All structures to be utilized in existing drainages along linear facilities shall be documented in the project drainage report and reflected in the project improvement plans. Channel erosion mitigation measures along linear facilities shall be subject to all the requirements of this Condition of Certification where applicable.					

Cond	itio	n of Certification	Verification	Responsible Agency
SOIL	ANI	D WATER RESOURCES (cont.)	1	
Non-	Tran	sient, Non-Community Water System		
mana of mo	gerianton gerianiton t. Pu	ATER-12: The Project is subject to the requirement of Title 22, Article 3, Sections 64400.80 through 64445 for a ient, non-community water system (serving 25 people or more for more than six months). In addition, the system is periodic monitoring for various bacteriological, inorganic and organic constituents.  The Project owner shall designate a California Certified Water Treatment Plant Operator as well as the technical, all and financial requirements as prescribed by State law. The Project owner will supply updates on an annual basis ing requirements, any submittals to County of Riverside as well and proof of annual renewal of the operating ursuant to this requirement, the Project owner shall obtain a permit from the County of Riverside to operate a non-non-community water system.	The Project owner shall obtain a permit to operate a non-transient, non-community water system with the County of Riverside at least sixty (60) days prior to commencement of operations at the site. The Project owner shall supply updates annually for all monitoring requirements and submittals to County of Riverside related to the permit, and proof of annual renewal of the operating permit.	CEC/BLM
Chan	nel	Maintenance Program		
<ul> <li>SOIL&amp;WATER-13: The Project owner shall develop and implement a Channel Maintenance Program that provides long-term guidance to implement routine channel maintenance projects and comply with conditions of certification in a feasible and environmentally-sensitive manner. The Channel Maintenance Program will be a process and policy document prepared by the Project owner, reviewed by the CPM. The Project owner shall supervise the implementation of a Channel Maintenance Program in accordance with conditions of certification.</li> <li>The Channel Maintenance Program shall include the following:</li> <li>A. Purpose and Objectives – Establishes the main goals of the Program, of indefinite length, to maintain the diversion channel to meet its original design to provide flood protection, support Project mitigation, protect wildlife habitat and movement/ migration, and maintain groundwater recharge.</li> <li>B. Application and Use - The channel maintenance work area is defined as the Project engineered channel, typically</li> </ul>		to implement routine channel maintenance projects and comply with conditions of certification in a feasible and entally-sensitive manner. The Channel Maintenance Program will be a process and policy document prepared by ct owner, reviewed by the CPM. The Project owner shall supervise the implementation of a Channel Maintenance in accordance with conditions of certification.  Intel Maintenance Program shall include the following:  pose and Objectives – Establishes the main goals of the Program, of indefinite length, to maintain the diversion ninel to meet its original design to provide flood protection, support Project mitigation, protect wildlife habitat and vement/ migration, and maintain groundwater recharge.  Dication and Use - The channel maintenance work area is defined as the Project engineered channel, typically	At least sixty (60) days prior to the start of any project-related activities (not including linears), the Project owner shall coordinate with the CPM to develop the Channel Maintenance Program. The Project owner shall submit two copies of the programmatic documentation, describing the proposed Channel Maintenance Program, to the CPM (for review and approval). The Project owner shall provide written notification that they plan to adopt and implement the measures identified in the approved Channel Maintenance Program.	CEC/BLM
	exte for a	ending to the top of bank, include access roads, and any adjacent property that Project owns or holds an easement access and maintenance. The Program would include all channel maintenance as needed to protect the Project lities and downstream property owners.		
C.	Cha	nnel Maintenance Activities		
	1.	<b>Sediment Removal</b> - sediment is removed when it: (1) reduces the diversion channel effective flood capacity, to less than the design discharge, (2) prevents appurtenant hydraulic structures from functioning as intended, and (3) becomes a permanent, non-erodible barrier to instream flows.		
	2.	<b>Vegetation Management</b> - Vegetation management shall include control of invasive or nonnative vegetation as prescribed in Condition of Certification <b>BIO-14</b> .		
	3.	Bank Protection and Grade Control Repairs – Bank protection and grade control structure repairs involve any action by the Project owner to repair eroding banks, incising toes, scoured channel beds, as well as preventative erosion protection. The Project owner would implement instream repairs when the problem: (1) causes or could cause significant damage to Project; adjacent property, or the structural elements of the diversion channel; (2) is a		

Con	ditio	n of Certification	Verification	Responsible Agency
SOIL	L ANI	WATER RESOURCES (cont.)		
		public safety concern; (3) negatively affects groundwater recharge; or (4) negatively affects the mitigation vegetation, habitat, or species of concern.		
	4.	<b>Routine Channel Maintenance</b> - trash removal and associated debris to maintain channel design capacity; repair and installation of fences, gates and signs; grading and other repairs to restore the original contour of access roads and levees (if applicable); and removal of flow obstructions at Project storm drain outfalls.		
	5.	Channel Maintenance Program – Exclusions including: emergency repair and CIP.		
D.	prog requ	ated Programmatic Documentation –the CPM will review and approve the Channel Maintenance Program grammatic documentation. Maintenance activities shall comply with the stream alteration agreement provisions and uirements for channel maintenance activities consistent with California's endangered species protection regulations other applicable regulations.		
E.	Cha	nnel Maintenance Process Overview		
	1.	<b>Program Development and Documentation</b> – This documentation provides the permitting requirements for channel maintenance work in accordance with the conditions of certification for individual routine maintenance of the engineered channel without having to perform separate CEQA/NEPA review or obtain permits. The Project owner shall supervise the implementation of a Channel Maintenance Program in accordance with conditions of certification.		
	2.	Maintenance Guidelines - based on two concepts: (1) the maintenance standard and (2) the acceptable maintenance condition, and applies to sediment removal, vegetation management, trash and debris collection, blockage removal, fence repairs, and access road maintenance.		
	3.	Implementation – Sets Maintenance Guidelines for vegetation and sediment management. Project's vegetation management activities are established in Condition of Certification BIO-14. Maintenance Guidelines for sediment removal provide information on the allowable depth of sediment for the engineered channel that would continue to provide design discharge protection.		
	4.	<b>Reporting</b> –the CPM requires the following reports to be submitted each year as part of the Annual Compliance Report:		
		<ul> <li>a. Channel Maintenance Work Plan - Describes the planned "major" maintenance activities and extent of work to be accomplished; and</li> </ul>		
		<ul> <li>Channel Maintenance Program Annual Report – Specifies which maintenance activities were completed during the year including type of work, location, and measure of the activity (e.g. cubic yards of sediment removed).</li> </ul>		
		<ul> <li>A report describing "Lessons Learned" to evaluate the effectiveness of both resource protection and maintenance methods used throughout the year.</li> </ul>		
F.	feas	<b>ource Protection Policies</b> - establishes policies to ensure that resources would be protected to the fullest extent itible during routine channel maintenance activities. Policies would be developed to guide decision-making for naintenance activities. BMPs shall be developed to implement these policies.		

Condition of Certification	Verification	Responsible Agency				
SOIL AND WATER RESOURCES (cont.)						
In addition, the Project owner shall:						
Supervise the implementation of a Channel Maintenance Program in accordance with conditions of certification;						
• Ensure the Project Construction and Operation Managers receive training on the Channel Maintenance Program;						
As part of the Project Annual Compliance Report to the CPM, submit a Channel Maintenance Program Annual Report specifying which maintenance activities were completed during the year including type of work, location, and measure of the activity (e.g. cubic yards of sediment removed).						
Closure and Decommissioning Plan						
SOIL&WATER-14 The Project owner shall identify likely decommissioning scenarios and develop specific decommissioning plans for each scenario that will identify actions to be taken to avoid or mitigate long-term impacts related to water and wind erosion after decommissioning. Actions may include such measures as a decommissioning surface water monitoring, revegetation and restoration of disturbed areas, post-decommissioning maintenance, collection and disposal of project materials and chemicals, and access restrictions.	At least sixty (60) days prior to the start of site mobilization or alternate date as agreed to with BLM, the Project owner shall submit decommissioning plans to the CPM for review and approval. The Project owner shall amend these documents as necessary, with approval from the CPM, should the decommissioning scenario change in the future.	CEC/BLM				

#### Mitigation of Impacts to the Palo Verde Mesa Groundwater Basin

Genesis and Staff have been engaged in productive discussions to develop a water mitigation plan acceptable to both parties. Genesis and Staff concur that the Project will decrease the amount of groundwater underflow from the CVGB to the PVMGB, but that there is no existing legal requirement for the Project to obtain an entitlement to Colorado River water for its water supply. However, a difference of opinion persists as to the Project's potential effects/impacts on the Colorado River and associated drains. Genesis contends that given the existing groundwater mound in the adjacent Palo Verde Valley and its relationship to the river and drains, it is not possible for the decreased underflow to the PVMGB to cause Colorado River water to move from the river or the drains into the subsurface. CEC staff does not accept this contention, but does agree that whatever the effect of PVMGB water depletion is on the adjacent Palo Verde Valley Groundwater Basin or on the river, it will be less than the amount of PVMGB depletion. For this reason, Staff and Genesis have agreed that Genesis will mitigate its impacts on the PVMGB water budget. This would address any concern regarding project impacts to the river or drains, and the amount of water required to offset the PVMGB water budget depletion will be greater than what would be required to offset any theoretical impact to the river or drains, and thus the measure is conservative.

**SOIL&WATER-15** The Project owner shall undertake one or more of the activities identified below to mitigate project impacts that result in depletion of the PVMGB groundwater budget. The amount of PVMGB depletion requiring mitigation shall be determined based on an analysis of the Project's effect on the PVMGB groundwater budget, including an estimate of the decrease in underflow from the CVGB to the PVMGB. The analysis shall be conducted as described in Soil & Water 19.

Water conservation projects that may be considered as mitigation include the following: payment for irrigation improvements in Palo Verde Irrigation District (PVID), payment for conversion to cultivation of crops with lower crop water demand in the PVID, use of tertiary treated water, implementation of water conservation programs in the CVGB, PVMGB or Colorado River flood plain communities, and/or participation in BLM's Tamarisk Removal Program. The Project owner will be required to demonstrate to the satisfaction of the CPM that the appropriate amounts of water will be conserved.

The Project Owner shall submit a Water Supply Plan to the CPM for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation. CEC/BLM

Con	dition of Certification	Verification	Responsible Agency
SOIL	L AND WATER RESOURCES (cont.)		
The appr	activities proposed for mitigation will be outlined in a Water Supply Plan that will be provided to the CPM for review and roval. The Water Supply Plan shall include the following at a minimum:		
A.	Identification of the activity and water source that will replace the decreased underflow to the PVMGB determined under Soil & Water 19;		
B.	Demonstration of the Project owner's legal entitlement to the water or ability to conduct the activity;		
C.	Discuss whether any governmental approval of the identified activities will be needed, and, if so, whether additional that approval will require compliance with CEQA or NEPA;		
D.	Demonstration of how water diverted from the PVMGB will be replaced for each of the activities;		
E.	An estimated schedule for completion of the activities;		
F.	Performance measures that would be used to evaluate the amount of water replaced by the activities; and		
G.	Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show the activities are achieving the intended benefits and replacing PVMGB diversions		
agre cann	Project owner shall implement the activities reviewed and approved in the Water Supply Plan in accordance with the sed upon schedule in the Water Supply Plan. If agreement on identification or implementation of mitigation activities not be achieved the Project owner shall immediately halt construction or operation until assurance that the agreed upon vities can be identified and implemented.		
Grou	undwater Production Reporting		1
	<b>L&amp;WATER–16</b> The Project will file an annual notice per the requirement of Water Code Sections 4999 et. seq. for orting of groundwater production in excess of 25 acre feet per year.	The Project owner shall file an annual "Notice of Extraction and Diversion of Water" with the SWRCB in accordance with Water Code Sections 4999 et. seq. The Project owner shall include a copy of the filling in the annual compliance report.	CEC/BLM
Grou	und Subsidence Monitoring and Action Plan		
cons	<b>L&amp;WATER–17</b> One monument monitoring station per production well or a minimum of three stations shall be structed to measure potential inelastic subsidence that may alter surface characteristics of the Chuckwalla Valley near proposed production wells. The Project owner shall:	The Project owner shall do all of the following:  1. At least thirty (30) days prior to Project construction, the Project owner shall submit to the	CEC/BLM
	Prepare and submit a Subsidence Monitoring Plan (SMP), including all calculations and assumptions. The plan shall include the following elements:	CPM, a comprehensive report presenting all the data and information required in item A above.	
	<ol> <li>Construction diagrams of the proposed monument monitoring station including size and description, planned depth, measuring points, and protection measures;</li> </ol>	During Project construction and operations, the Project owner shall submit to the CPM quarterly reports presenting all the data and information	

Cor	diti	on of Certification	Vei	rification	Responsible Agency
SOIL AND WATER RESOURCES (cont.)					
	2.	Map depicting locations (minimum of three) of the planned monument monitoring stations;		required in item B above.	
	3.	Monitoring program that includes monitoring frequency, thresholds of significance, reporting format.	3.		
3.		epare quarterly reports commencing three (3) months following commencement of groundwater production during instruction and operations.		calculations and assumptions made in development of the report data and interpretations.	
	1.	The reports will include presentation and interpretation of the data collected including comparison to the thresholds developed in Item C.	4.	After the first five (5) years of the monitoring period, the Project owner shall submit a 5-year	
Э.	Pre	epare a Mitigation Action Plan that will detail the following:		monitoring report to the CPM that submits all monitoring data collected and provides a	
	1.	Thresholds of significance for implementation of proposed action plan;		summary of the findings. The CPM will determine	
		<ul> <li>Any subsidence that may occur will not be allowed to damage existing structures either on or off the site or alter the appearance or use of the structure;</li> </ul>		if the Ground Subsidence Monitoring and Action Plan frequencies should be revised or eliminated.	
		<ul> <li>Any subsidence that may occur will not be allowed to alter the natural drainage patterns or permit the formation of playas or lakes to form;</li> </ul>			
		c. Any subsidence that violates (a) or (b) will result in the Project owner to investigate the need to immediately reduce/cease pumping until the cause is interpreted subsidence caused by project pumping abates and the structures and/or drainage patterns are stabilized and corrected.			
	2.	Action Plan that details proposed actions by the applicant in the event thresholds are achieved during the monitoring program			
Eng	inee	olicant will be required to submit the Ground Subsidence Monitoring and Action Plan that is prepared by an ering Geologist registered in the State of California thirty (30) days prior to the start of extraction of groundwater for extraction.			
Wat	er F	Policy Compliance			
und repl Mes	ertal acer sa G	VATER-18 If the Project owner uses wet cooling as part of the overall project, the Project owner shall ke one or more of the activities identified below to ensure Water Policy Compliance. These activities shall result in ment of 50,590 acre feet (~1,605 acre-feet annually) in the Chuckwalla Valley Groundwater Basin or the Palo Verde roundwater Basin, unless the Project owner mitigates its impacts to the Colorado River through Colorado River water at per SOIL & WATER 15.	Cor	e Project owner shall submit a Water Policy mpliance Water Supply Plan to the CPM for review d approval thirty (30) days before the start of raction of groundwater for construction or operation.	CEC/BLM
tech the	nolo Proj	oject owner refines the estimate of Colorado River impacts per <b>SOIL &amp; WATER 19</b> , or uses Zero Liquid Discharge ogy, but still chooses to wet cool, the remaining groundwater use shall be offset in accordance with this condition. If ect owner chooses to dry cool, reducing water use to 202 afy during operations, this condition does not apply and ommends that this project be determined to have met with the Energy Commission's water policy.			
		vities proposed for mitigation will be outlined in a Water Policy Compliance Water Supply Plan that will be provided to If for review and approval. The Water Policy Compliance Water Supply Plan shall include the following at a minimum:			

Coi	dition of Certification	Verification	Responsible Agency
so	AND WATER RESOURCES (cont.)		
A.	Identification of the activity and water source that will replace 50,590 acre feet or 1,605 afy under a wet cooling Project alternative;		
B.	Demonstration of the Project owner's legal entitlement to the water or ability to conduct the activity;		
C.	Include a discussion of any needed governmental approval of the identified activities, including a discussion of whether that approval that requires;		
D.	Discuss whether any governmental approval of the identified activities will be needed, and, if so, whether additional that approval will require compliance with CEQA or NEPA;		
E.	An estimated schedule for completion of the activities;		
F.	Performance measures that would be used to evaluate the amount of water replaced by the activities;		
G.	Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show the activities are achieving the intended benefits and replacing the water; and		
H.	If the application for allocation from the Colorado River is accepted by the USBR, the Project owner shall submit to the CPM for their approval, a copy of a water allocation from the Colorado River issued by the CRB for the Projects diversion of Colorado River water.		
in a	Project owner shall implement the activities reviewed and approved in the Water Policy Compliance Water Supply Plan accordance with the agreed upon schedule in the Water Policy Compliance Water Supply Plan. If agreement on tification or implementation of mitigation activities cannot be achieved the Project owner shall immediately halt struction or operation until assurance that the agreed upon activities can be identified and implemented.		
Est	mation of Impacts to PVMGB		
acc	<b>L&amp;WATER-19</b> The Project owner, for the purpose of determining the appropriate volume of water for mitigation in ordance with <b>SOIL&amp;WATER-15</b> shall conduct an analysis of the Project's effect on the PVMGB groundwater budget ding an estimate of the decrease in underflow from the CVGB to the PVMGB. The analysis shall include the following:	Within thirty (30) days prior to mobilization of the proposed Project, the Project owner will submit to the CPM for their approval a report detailing the results of	CEC/BLM
A.	Refinement of the estimate of decrease in underflow from the CVGB to the PVMGB using the numerical groundwater flow model developed for the Project. An upper-bound estimate of the underflow decrease shall be developed through sensitivity analysis of the lateral hydraulic conductivity of the pumped aquifer and the general head boundaries, as well as recharge.	the modeling effort. The report will include the estimated amount of PVMGB underflow depletion due to project pumping. This estimate shall be used for determining the appropriate volume of water for mitigation in accordance with SOIL&WATER-15.	
	<ol> <li>A statistical analysis of the seventeen existing aquifer tests and specific capacity tests in the eastern CVGB shall be conducted to characterize the distribution of hydraulic conductivity values in the area.</li> </ol>	<u> </u>	
	<ol> <li>Model runs shall be conducted using the first quartile (25 percent), second quartile (50 percent) and third quartile (75 percent) hydraulic conductivities to evaluate the change in underflow induced by Project pumping under a reasonable of values.</li> </ol>		
	3. The effect of recharge in the model domain shall be simulated by applying mountain front recharge at the appropriate locations in amounts representing two percent to three percent of total average incident precipitation falling on the model.		

Cor	ndition of Certification	Verification	Responsible Agency		
SOIL AND WATER RESOURCES (cont.)					
	domain and tributary mountain areas.				
B.	The maximum predicted decrease in underflow from the CVGB to the PVMGB shall be used to assess the volume of water requiring mitigation under Soil & Water 15. The volume predicted will include the cumulative decrease in underflow during the period the project pumps groundwater from the CVGB as well as any latency effects following cessation of pumping. The latency period will extend until underflow achieves pre-project conditions.				
C.	An assessment report shall be prepared summarizing the methods and results of this supplemental analysis, presenting any supporting data, assumptions made, and an estimate of the uncertainty of PVMGB underflow depletion.				
D.	The Project owner shall present the results of the conceptual model, numerical model, transient runs and sensitivity analysis in a report for review and approval by the CPM. The report shall include all pertinent information regarding the development of the numerical models. The report shall include:				
	1. Introduction				
	2. Previous Investigations				
	3. Conceptual Model				
	4. Numerical Model and Input Parameters				
	5. Sensitivity Analysis				
	6. Transient Modeling Runs				
	7. Conclusions				
	oundwater Quality Monitoring and Reporting Plan		250/5111		
for in met mor SOI con prin the esta	The Project owner shall submit a Groundwater Quality Monitoring and Reporting Plan to the CPM review and approval. The Groundwater Quality Monitoring and Reporting Plan shall provide a description of the hodology for monitoring background and site groundwater levels and quality. The sampling required for the water quality intoring program shall be implemented during groundwater level monitoring events using the well identified to comply with L&WATER-2. Prior to project construction, monitoring shall commence to establish pre-construction groundwater quality ditions in the well proposed for the program. Monitoring shall continue during construction and project operation. The nary objectives for the water quality monitoring program are to identify potential changes in the existing water quality of proposed water supply resulting from Project pumping, if any, in concert with Condition of Certification SOIL&WATER-2, ablish pre-construction and project related groundwater quality data and to avoid, minimize, or mitigate significant impacts ensitive receptors (springs and groundwater-dependent vegetation, and groundwater supply users).  The Plan shall include a scaled map showing the site and vicinity, existing well locations, and proposed monitoring	The Project owner shall complete the following:  At least six (6) weeks prior to the start of construction activities, a Groundwater Level and Quality Monitoring and Reporting Plan shall be submitted to the CPM for review and approval.	CEC/BLM		
Λ.	locations (both existing wells and new monitoring wells proposed for construction). Additional monitoring wells to be installed include wells required under Waste Discharge Requirements issued by the CRBRWQCB for the evaporation ponds and land treatment unit proposed for the project. The map shall also include relevant natural and man-made features (existing and proposed as part of this project). The plan also shall provide: (1) well construction information				

Con	Condition of Certification		Verification	Responsible Agency
SOI	_ AN[	WATER RESOURCES (cont.)		
	and and	borehole lithology for each existing well proposed for use as a monitoring well; (2) description of proposed drilling well installation methods; (3) proposed monitoring well design; and, (4) schedule for completion of the work.		
B.	shal The emp deve casi	east four (4) weeks prior to construction, a Well Monitoring Installation and Groundwater Quality Network Report I be submitted to the CPM for review and approval in conjunction with Condition of Certification SOIL&WATER-2. report shall include a scaled map showing the final monitoring well network. It shall document the drilling methods loyed, provide individual well construction as-builds, borehole lithology recorded from the drill cuttings, well elopment, and well survey results. The well survey shall measure the location and elevation of the top of the welling and reference point for all water level measurements, and shall include the coordinate system and datum for the ey measurements.		
C.		part of the monitoring well network development, all newly constructed monitoring wells shall be constructed sistent with State and Riverside County specifications.		
D.		east four (4) weeks prior to use of any groundwater for construction, all groundwater quality and groundwater level itoring data shall be reported to the CPM. The report shall include the following:		
	1.	An assessment of pre-project groundwater levels, a summary of available climatic information (monthly average temperature and rainfall records from the nearest weather station).		
	2.	As assessment of pre-project groundwater quality with groundwater samples analyzed for TDS, chloride, nitrates, major cations and anions, oxygen-18 and deuterium isotopes, and any other constituents the CPM deem critical in protecting existing water supply quality.		
	3.	The data shall be tabulated, summarized, and submitted to the CPM. The data summary shall include the estimated range (minimum and maximum values), average, and median for each constituent analyzed. If a sufficient number of data points are available, the data shall also be analyzed using the Mann-Kendall test for trend at 90 percent confidence to assess whether pre-project water quality trends, if any, are statistically significant.		
E.	mor Afte CPN wate tren infor	Ing project construction and during the first five years of project operations, the Project owner shall semi-annually itor the quality of groundwater and changes in groundwater elevation and submit data semi-annually to the CPM. If five years of project operations, the frequency and scope of the monitoring program shall be reassessed by the M. The summary report shall document water level and quality monitoring methods, the water level and quality data, are level and quality plots and trend evaluation, and a comparison between pre- and post-project start-up water level data as itemized below. The report shall also include a summary of actual water use conditions, monthly climatic mation (temperature and rainfall) from the nearest meteorological monitoring station, and a comparison and essment of water level data relative to the assumptions and simulated spatial trends predicted by the applicant's indwater model.		
	1.	Groundwater samples from all wells in the monitoring well network shall be analyzed and reported semi-annually for TDS, chloride, nitrates, cations and anions, oxygen-18 and deuterium isotopes. These analyses, and particularly the stable isotope data, can be useful for identifying water sources and assessing their contributions to the quality of water produced by wells.		

Conditio	n of Certification	Verification	Responsible Agency
SOIL AN	D WATER RESOURCES (cont.)		
2.	For analysis purposes, pre-project water quality shall be defined by samples collected prior to project construction as specified above, and compliance data shall be defined by samples collected after the construction start date. The compliance data shall be analyzed for both trends and for contrast with the pre-project data.		
3.	Trends shall be analyzed using the Mann-Kendall test for trend at the 90 percent confidence, once a statistically significant number of sample data are available. Trends in the compliance data shall be compared and contrasted to pre-project trends, if any.		
4.	The contrast between pre-project and compliance mean or median concentrations shall be compared using an Analysis of Variance (ANOVA) or other appropriate statistical method approved by the RWQCB for evaluation of water quality impacts. A parametric ANOVA (for example, an F-test) can be conducted on the two data sets if the residuals between observed and expected values are normally distributed and have equal variance, or the data can be transformed to an approximately normal distribution. If the data cannot be represented by a normal distribution, then a nonparametric ANOVA shall be conducted (for example, the Kruskal-Wallis test). If a statistically significant difference is identified at 90 percent confidence between the two data sets, the monitoring data are inconsistent with random differences between the pre-project and baseline data indicating a water quality impact from project pumping may be occurring.		
5.	If compliance data indicate that the water supply quality has deteriorated (exceeds pre-project constituent concentrations in TDS, sodium, chloride, or other constituents identified as part of the monitoring plan and applicable Water Quality Objectives are exceeded for the applicable beneficial uses of the water supply) for three consecutive years, the Project owner shall provide treatment or a new water supply to either meet or exceed pre-project water quality conditions to any impacted water supply wells.		
TRAFFIC	C AND TRANSPORTATION		
shall prepaddress t	I Traffic Control Plan. Prior to start of construction of the Genesis Solar Energy Project (GSEP) the project owner pare and implement a Traffic Control Plan (TCP) for the GSEP's construction and operation traffic. The TCP shall the movement of workers, vehicles, and materials, including arrival and departure schedules, and designated and delivery routes.	At least 60 calendar days prior to the start of construction, including any grading or site remediation on the power plant site or its associated easements, the project owner shall submit the proposed traffic control	CEC/BLM
in the pre County of comment	ect owner shall consult with the County of Riverside and the Department of Transportation (Caltrans) District 8 office eparation and implementation of the Traffic Control Plan and shall submit the proposed Traffic Control Plan to the f Riverside and the Department of Transportation (Caltrans) District 8 office in sufficient time for review and to the Energy Commission Compliance Project Manager (CPM) for review and approval prior to the proposed start action and implementation of the plan.	plan to the County of Riverside and the Department of Transportation (Caltrans) District 8 office for review and comment and to the CPM for review and approval. The project owner shall also provide the CPM with a copy of the transmittal letter to the County of Riverside and the Department of Transportation (Caltrans) District 8 office requesting review and comment.	
The proje Transpor of constru	ect owner shall provide a copy of any written comments from the County of Riverside and the Department of tation (Caltrans) District 8 office and any changes to the Traffic Control Plan to the CPM prior to the proposed start action.	At least 30 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters received from either the County of	

Cor	ndition of Certification	Verification	Responsible Agency
TRAFFIC AND TRANSPORTATION (cont.)			
The	Traffic Control Plan shall include:  A work schedule and end-of-shift departure plan designed to ensure that stacking does not occur on intersections necessary to enter and exit the project sites. The project owner shall consider using one or more of the following	Riverside and the Department of Transportation (Caltrans) District 8 office, along with any changes to the proposed traffic control plan to the CPM for review	
	measures designed to prevent stacking: staggered work shifts; off-peak work schedules; restricting travel to and departures from each project site to 10 or fewer vehicles every three minutes during peak travel hours on Interstate 10.	and approval.	
	The project owner may use any of the above traffic measures or any other measures if the project owner can demonstrate that the implemented measures would ensure that Interstate 10 operates at a Level of Service (LOS) C or higher during the peak travel hours.		
•	Provisions for an incentive program such as an employer-sponsored Commuter Check Program to encourage construction workers to carpool and/or use van or bus service.		
•	Limitation on truck deliveries to the project sites to only off-peak hours to ensure adequate exit and entry at appropriate intersections.		
•	Provisions for redirection of construction traffic with a flag person as necessary to ensure traffic safety and minimize interruptions to non-construction related traffic flow.		
•	Placement of signage, lighting, and traffic control device at the project construction site and laydown areas.		
•	Signage along eastbound and westbound appropriate roads and at the entrance of each of the I-10 northbound and southbound off-ramps at appropriate roads notifying drivers of construction traffic throughout the duration of the construction period.		
•	A heavy-haul plan designed to address the transport and delivery of heavy and oversized loads requiring permits from Department of Transportation (Caltrans) or other state and federal agencies.		
•	Parking for workforce and construction vehicles.		
•	Emergency vehicle access to the project site.		
of T and	ANS-2 Oversized and Overweight Vehicles The project owner shall comply with limitations imposed by the Department ransportation (Caltrans) District 8 office and other relevant jurisdictions including the County of Riverside on vehicle sizes weights and driver licensing. In addition, the project owner or its contractor shall obtain necessary transportation permits in the Department of Transportation (Caltrans) and all relevant jurisdictions for use of roadways.	In the Monthly Compliance Reports (MCRs), the project owner shall report permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation on-site for Compliance Project Manager (CPM) inspection if requested.	CEC/BLM
of T	ANS-3 Encroachment into Public Rights-of-Way The project owner or its contractor shall comply with the Department ransportation (Caltrans) and other relevant jurisdictions limitations for encroachment into public rights-of-way and shall as necessary encroachment permits from the Department of Transportation (Caltrans) and all relevant jurisdictions.	In the MCR's, the project owner shall report permits received during that reporting period. In addition, for at least six months after the start of commercial operation, the project owner shall retain copies of permits and supporting documentation on-site for CPM inspection, if requested.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
TRAFFIC AND TRANSPORTATION (cont.)		
<b>TRANS-4 Securing Permits/Licenses to Transport Hazardous Materials</b> The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Department of Transportation (Caltrans) for the transport of hazardous materials.	In the MCR's, the project owner shall report permits and/or licenses for hazardous substance transportation received during that reporting period. In addition, the project owner shall retain copies of permits, licenses, and supporting documentation on-site for CPM inspection if requested.	CEC/BLM
<b>TRANS-5 Restorations of All Public Roads, Easements, and Rights-of-Way</b> The project owner shall restore all public roads, easements, and rights-of-way that have been damaged due to project-related construction activities to original or near-original condition in a timely manner, as directed by the CPM. Repairs and restoration of access roads may be required at any time during the construction phase of the project to assure safe ingress and egress.	At least 30 days prior to the start of mobilization, the project owner shall photograph or videotape all affected public roads, easements, and right-of-way segments and/or intersections and shall provide the CPM, the affected local jurisdictions and the Department of Transportation (if applicable) with a copy of these images. The project owner shall rebuild, repair and maintain all public roads, easements, rights-of-way in a usable condition throughout the construction phase of the project.	CEC/BLM
	Prior to the start of site mobilization, the project owner shall consult with the County of Riverside and the Department of Transportation (Caltrans) District 8 and notify them of the proposed schedule for project construction. The purpose of this notification is to request that the County of Riverside and the Department of Transportation (Caltrans) consider postponement of public right-of-way repair or improvement activities in areas affected by project construction until construction is completed and to coordinate with the project owner regarding any concurrent construction-related activities that are planned or in progress and cannot be postponed.	
	Within 60 calendar days after completion of construction, the project owner shall meet with the CPM, the County of Riverside and Department of Transportation (Caltrans) District 8 to identify sections of public right-of-way to be repaired. At that time, the project owner shall establish a schedule to complete the repairs and to receive approval for the action(s). Following completion of any public right-of-way repairs, the project owner shall provide a letter signed by the County of Riverside and the Department of Transportation (Caltrans) District 8 stating their satisfaction with the repairs to the CPM.	

Condition of Certification	Verification	Responsible Agency
TRANSMISSION LINE SAFETY AND NUISANCE		
<b>TLSN-1</b> The project owner shall construct the proposed transmission line according to the requirements of California Public Utility Commission's GO-95, GO-52, GO-131-D, Title 8, and Group 2. High Voltage Electrical Safety Orders, sections 2700 through 2974 of the California Code of Regulations, and Southern California Edison's EMF reduction guidelines.	At least 30 days before starting the transmission line or related structures and facilities, the project owner shall submit to the Compliance Project Manager (CPM) a letter signed by a California registered electrical engineer affirming that the lines will be constructed according to the requirements stated in the condition.	CEC/BLM
<b>TLSN-2</b> The project owner shall use a qualified individual to measure the strengths of the electric and magnetic fields from the line at the points of maximum intensity along the route for which the applicant provided specific estimates. The measurements shall be made before and after energization according to the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) standard procedures. These measurements shall be completed no later than 6 months after the start of operations.	The project owner shall file copies of the pre-and post- energization measurements with the CPM within 60 days after completion of the measurements.	CEC/BLM
<b>TLSN-3</b> The project owner shall ensure that the rights-of-way of the proposed transmission line are kept free of combustible material, as required under the provisions of section 4292 of the Public Resources Code and section 1250 of Title 14 of the California Code of Regulations.	During the first 5 years of plant operation, the project owner shall provide a summary of inspection results and any fire prevention activities carried out along the right-of-way and provide such summaries in the Annual Compliance Report.	CEC/BLM
<b>TLSN-4</b> The project owner shall ensure that all permanent metallic objects within the right-of-way of the project-related lines are grounded according to industry standards regardless of ownership.	At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition.	CEC/BLM
TRANSMISSION SYSTEM ENGINEERING		
<b>TSE-1</b> The project owner shall furnish to the CPM and to the CBO a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested.	Prior to the start of construction, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see a list of major equipment in Table 1: Major Equipment List below). Additions and deletions shall be made to the table only with CPM and CBO approval. The project owner shall provide schedule updates in the Monthly Compliance Report.	

Condition of Certification	Verification	Responsible Agency
TRANSMISSION SYSTEM ENGINEERING (cont.)		
	Table 1: Major Equipment List	
	Breakers	
	Step-up transformer	
	Switchyard	
	Busses	
	Surge arrestors	
	Disconnects	
	Take-off facilities	
	Electrical control building	
	Switchyard control building	
	Transmission pole/tower	
	Grounding system	
<b>TSE-2</b> Before the start of construction, the project owner shall assign to the project an electrical engineer and at least one of each of the following:	Prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the	
a) a civil engineer;	names, qualifications, and registration numbers of all the responsible engineers assigned to the project. The	
b) a geotechnical engineer or a civil engineer experienced andknowledgeable in the practice of soils engineering;	project owner shall notify the CPM of the CBO's	
c) a design engineer who is either a structural engineer or a civil engineer and fully competent and proficient in the design of power plant structures and equipment supports; or	approvals of the engineers within five days of the approval.	
d) a mechanical engineer (Business and Professions Code Sections 6704 et seq. require state registration to practice as either a civil engineer or a structural engineer in California).	If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and	
The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers as long as each engineer is responsible for a particular segment of the project, e.g., proposed earthwork, civil structures, power plant structures, or equipment support. No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer. The civil, geotechnical, or	registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.	

Condition of Certification	on	Verification	Responsible Agency
TRANSMISSION SYSTE	M ENGINEERING (cont.)		
civil and design engineer review of the TSE facilitie	, assigned as required by Facility Design Condition <b>GEN-5</b> , may be responsible for design and es.		
engineers assigned to the owner shall submit the na and approval. The projec authorized to halt earth w	submit to the CBO, for review and approval, the names, qualifications, and registration numbers of all be project. If any one of the designated engineers is subsequently reassigned or replaced, the project arme, qualifications, and registration number of the newly assigned engineer to the CBO for review to owner shall notify the CPM of the CBO's approval of the new engineer. This engineer shall be work and require changes; if site conditions are unsafe or do not conform with the predicted asis for design of earth work or foundations.		
The electrical engineer sh	hall:		
1. be re	esponsible for the electrical design of the power plant switchyard, outlet, and termination facilities;		
2. sign	and stamp electrical design drawings, plans, specifications, and calculations.		
design review and approv California Building Code, Responsibilities of the Sp	ncy in design and/or construction is discovered in any engineering work that has undergone CBO val, the project owner shall document the discrepancy and recommend corrective action (2001 Chapter 1, section 108.4, approval required; Chapter 17, section 1701.3, <i>Duties and pecial Inspector;</i> Appendix Chapter 33, section 3317.7, <i>Notification of Noncompliance</i> ). The on shall become a controlled document and shall be submitted to the CBO for review and approval in of certification.	The project owner shall submit a copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for the disapproval, along with the revised corrective action required to obtain the CBO's approval.	
plans for that increment of construction have been approved by the CBO. These plans, together with design changes and design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. The following activities shall be reported in the monthly compliance report:  project owner shall submit to the CBO for review approval the final design plans, specifications calculations for equipment and systems of the plant switchyard, and outlet line and termination including a copy of the signed and stamped states.		Prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, and outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer verifying compliance with all applicable LORS, and send the	
b)	testing or energization of major electrical equipment; and	CPM a copy of the transmittal letter in the next monthly	
c)	the number of electrical drawings approved, submitted for approval, and still to be submitted.	compliance report.	
TSE-5 The project owner shall ensure that the design, construction, and operation of the proposed transmission facilities will conform to all applicable LORS, and the requirements listed below. The project owner shall submit the required number of copies of the design drawings and calculations, as determined by the CBO.  Prior to the start of construction of transmission facilities (or fewer days if mutually agreed upon by the project owner and CBO), the project owner shall			
General Order 95 or Nation	line shall meet or exceed the electrical, mechanical, civil, and structural requirements of CPUC onal Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles of Voltage Electric Safety Orders, California ISO standards, National Electric Code (NEC) and related	a) Design drawings, specifications, and calculations conforming with CPUC General Order 95 or	

Condition of Certification	Ve	rification	Responsible Agency
TRANSMISSION SYSTEM ENGINEERING (cont.)			
industry standards. b) Breakers and busses in the power plant switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis. c) Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards. d) The project conductors shall be sized to accommodate the full output of the project. e) Termination facilities shall comply with applicable SCE interconnection standards. f) The project owner shall provide to the CPM: i) The Special Protection System (SPS) sequencing and timing if applicable, ii) A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation, for which the project is responsible, are acceptable, iii) The final Phase II Interconnection Study, including a description of facility upgrades, operational mitigation measures, and/or special protection system sequencing and timing if applicable; and iv) A copy of the executed LGIA signed by the California ISO and the project owner.		National Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles 35, 36 and 37 of the <i>High Voltage Electric Safety Orders</i> , CA ISO standards, National Electric Code (NEC) and related industry standards, for the poles/towers, foundations, anchor bolts, conductors, grounding systems, and major switchyard equipment;  For each element of the transmission facilities identified above, the submittal package to the CBO shall contain the design criteria, a discussion of the calculation method(s), a sample calculation based on "worst case conditions"1 and a statement signed and sealed by the registered engineer in responsible charge, or other acceptable alternative verification, that the transmission element(s) will conform with CPUC General Order 95 or National Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles 35, 36 and 37 of the <i>High Voltage Electric Safety Orders</i> , California ISO standards, National Electric Code (NEC), and related industry standards; Electrical one-line diagrams signed and sealed by the registered professional electrical engineer in charge, a route map, and an engineering description of the equipment and configurations covered by requirements TSE-5 a) through f), above;  The Special Protection System (SPS) sequencing and timing if applicable shall be provided concurrently to the CPM.  A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation, for which the project is responsible, are acceptable,  The final Phase II Interconnection Study, including a description of facility upgrades, operational	

Condition of Certification	Verification	Responsible Agency
TRANSMISSION SYSTEM ENGINEERING (cont.)		
	system sequencing and timing if applicable, and	
	g) A copy of the executed LGIA signed by the California ISO and the project owner.	
<b>TSE-6</b> The project owner shall inform the CPM and CBO of any impending changes that may not conform to requirements <b>TSE-5</b> a) through f), and have not received CPM and CBO approval, and request approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or substation configurations shall not begin without prior written approval of the changes by the CBO and the CPM.	Prior to the construction of transmission facilities, the project owner shall inform the CBO and the CPM of any impending changes that` may not conform to requirements of <b>TSE-5</b> and request approval to implement such changes.	
<b>TSE-7</b> The project owner shall provide the following Notice to the California Independent System Operator (California ISO) prior to synchronizing the facility with the California Transmission system:	The project owner shall provide copies of the California ISO letter to the CPM when it is sent to the California	
1. At least one week prior to synchronizing the facility with the grid for testing, provide the California ISO a letter stating the proposed date of synchronization; and	ISO one week prior to initial synchronization with the grid. The project owner shall contact the California ISO Outage Coordination Department, Monday through	
2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the California ISO Outage Coordination Department.	Friday, between the hours of 0700 and 1530 at (916) 351- 2300 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with the California ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.	
<b>TSE-8</b> The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 or NESC, Title 8, CCR, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", applicable interconnection standards, NEC and related industry standards. In case of non-conformance, the project owner shall inform the CPM and CBO in writing, within 10 days of discovering such nonconformance and describe the corrective actions to be taken.	Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM and CBO:  a) "As built" engineering description(s) and one-line drawings of the electrical portion of the facilities signed and sealed by the registered electrical engineer in responsible charge. A statement attesting to conformance with CPUC GO-95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", and applicable interconnection standards, NEC, related industry standards, and these conditions shall be provided concurrently.	
	An "as built" engineering description of the mechanical, structural, and civil portion of the transmission facilities signed and sealed by the	

with the background soil.

#### TABLE G-1 (Continued) CONDITIONS OF CERTIFICATION

CONDITIONS OF CERTIFICATION		
Condition of Certification	Verification	Responsible Agency
TRANSMISSION SYSTEM ENGINEERING (cont.)		
	registered engineer in responsible charge or acceptable alternative verification. "As built" drawings of the electrical, mechanical, structural, and civil portion of the transmission facilities shall be maintained at the power plant and made available, if requested, for CPM audit as set forth in the "Compliance Monitoring Plan".	
	c) A summary of inspections of the completed transmission facilities, and identification of any nonconforming work and corrective actions taken, signed and sealed by the registered engineer in charge.	
VISUAL RESOURCES		
Surface Treatment of Non-Mirror Project Structures and Buildings		
VIS-1 The project owner shall treat all non-mirror surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the existing dark brown color of the background bailed as and mountain slopes as seen from the highway or in the case of foreground transmission poles, the lighter tan color	At least 30 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture, the	CEC/BLM

VIS-1 The project owner shall treat all non-mirror surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the existing dark brown color of the background bajadas and mountain slopes as seen from the highway or, in the case of foreground transmission poles, the lighter tan color of the valley floor; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. This measure shall include coloring of security fencing with vinyl or other non-reflective coating; or with slats or similar semi-opaque, non-reflective material, to blend to the greatest feasible extent

The project owner shall submit for CPM review and approval, a specific Surface Treatment Plan that will satisfy these requirements. The treatment plan shall include:

- A. A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes:
- B. A list of each major project structure, building, tank, pipe, and wall; the transmission line towers and/or poles; and fencing, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system;

At least 30 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture, the project owner shall submit the proposed treatment plan to the CPM for review and approval and simultaneously to Riverside County for review and comment. If the CPM determine that the plan requires revision, the project owner shall provide to and the CPM a plan with the specified revision(s) for review and approval by the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to the CPM for review and approval.

Upon completion of construction of specific facility structures, the project owner shall notify the CPM that surface treatment of that structure or building has been completed and is ready for inspection and shall submit one set of electronic color photographs of the

Condition of Certification	Verification	Responsible Agency
VISUAL RESOURCES (cont.)		
C. One set of color brochures or color chips showing each proposed color and finish;  D. A specific schedule for completion of the treatment; and  E. A procedure to ensure proper treatment maintenance for the life of the project.  The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated in the field, until the project owner receives notification of approval of the treatment plan by the CPM. Subsequent modifications to the treatment plan are prohibited without CPM approval.  Temporary and Permanent Exterior Lighting	structure. The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify a): the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.	
VIS-2 To the extent feasible, consistent with safety and security considerations, the project owner shall design and install all permanent exterior lighting and all temporary construction lighting such that a) lamps and reflectors are not visible from beyond the project site, including any off-site security buffer areas; b) lighting does not cause excessive reflected glare; c) direct lighting does not illuminate the nighttime sky, except for required FAA aircraft safety lighting; d) illumination of the project and its immediate vicinity is minimized, and e) the plan complies with local policies and ordinances. The project owner shall submit to the CPM for review and approval and simultaneously to the County of Riverside for review and comment a lighting mitigation plan that includes the following:  A. Location and direction of light fixtures shall take the lighting mitigation requirements into account;  B. Lighting design shall consider setbacks of project features from the site boundary to aid in satisfying the lighting mitigation requirements;  C. Lighting shall incorporate fixture hoods/shielding, with light directed downward or toward the area to be illuminated;  D. Light fixtures that are visible from beyond the project boundary shall have cutoff angles that are sufficient to prevent lamps and reflectors from being visible beyond the project boundary, except where necessary for security;  E. All lighting shall be of minimum necessary brightness consistent with operational safety and security; and  F. Lights in high illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have (in addition to hoods) switches, timer switches, or motion detectors so that the lights operate only when the area is occupied. To the greatest feasible extent, project lighting shall be used on an 'as needed' basis and turned off at other times.	At least 90 days prior to ordering any permanent exterior lighting or 30 days prior to temporary construction lighting, the project owner shall contact the CPM to discuss the documentation required in the lighting mitigation plan. At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval and simultaneously to the County of Riverside for review and comment a lighting mitigation plan. If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM.  The project owner shall not order any permanent exterior lighting until receiving CPM approval of the lighting mitigation plan.  Prior to commercial operation, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection. If after inspection, the CPM notify the project owner that modifications to the lighting are needed, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed and are ready for inspection.  Within 48 hours of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the	CEC/BLM

Condition of Certification	Verification	Responsible Agency
VISUAL RESOURCES (cont.)		
	complaint, and a schedule for implementation. The project owner shall notify the CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted the CPM within 30 days.	
VIS-3 DELETED		CEC/BLM
Reflective Glare Mitigation		
VIS-4 In order to reduce brightness of spread reflections of the sun to off-site viewers, the perimeter chain link fencing proposed by Applicant shall include opaque privacy slats of a minimum 8 feet in height. The slats shall be of a dark tan or earth-tone color selected to blend with the visual background of the site.	At least 90 days prior to start of construction of the fence, the project owner shall present to the CPM a plan describing the fencing measures and materials proposed for mitigating off-site glare. The plan shall include color samples of slatted fencing proposed for use. If the CPM determine that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM.	CEC/BLM
	The project owner shall not begin construction of the fence until receiving CPM approval of the revised plan.	
	Within 48 hours of receiving a glare complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify the CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to the CPM within 30 days.	
Visual Mitigation and Re-Vegetation of Staging Area		1
VIS-5 In order to minimize the visual prominence of the proposed staging area to visitors at Wiley's Well Rest Area on I-10, the project owner shall provide a revised site plan for staging that includes screening of the proposed laydown area with earth berms, opaque fencing, and/or other measures to minimize visibility from within the main rest area, and restoration and revegetation of the laydown area after completion of construction. The revised staging plan shall be consistent with any cultural or biological resource constraints identified elsewhere in this Staff Assessment/DEIS. Restoration shall include regrading to original contours in order to appear natural and undisturbed; revegetation shall employ appropriate locally native species only, again in accordance with conditions identified in the cultural and biological resource analyses of this report. The	At least 90 days prior to start of construction, the project owner shall present to the CPM a revised staging area site plan. If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM. The project owner shall not begin construction until receiving	CEC/BLM

#### Conditions of Certification

Condition of Certification	Verification	Responsible Agency
VISUAL RESOURCES (cont.)		
project owner shall provide a re-vegetation plan describing how the staging site will be restored following construction. The plan shall call for beginning of restoration of the site within the shortest feasible time following completion of construction.	CPM approval of the revised plan.	
	At least 60 days prior to start of operation, the project owner shall present to the CPM a revegetation plan for the staging area. If the CPM determine that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM. The project owner shall not begin operation until receiving CPM approval of the revised plan.	
Reduction of Form, Line, and Texture Contrast		
VIS-6 To the extent practicable, the project owner will use applicable design principles to reduce the visual contrast of the project with the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color (see VIS-1) and texture of the landscape; and reduction of unnecessary disturbance. Design strategies to address these fundamentals will be based on the following factors as applicable and feasible in this case:	As early as possible in the site and facility design, the project owner shall meet with the CPM to discuss incorporation of these above factors into the design plans. At least 90 days prior to construction, the project owner shall contact the CPM to review the incorporation of the above factors into the final facility and site design plans. If the CPM determine that the site and facility plans require revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM.	CEC/BLM
<b>Earthwork:</b> Select locations and alignments that fit into the landforms to minimize the size of cuts and fills. Avoid hauling in or hauling out of excess earth cut or fill. Avoid rounding and/or warping slopes. Avoid soil types that generate strong color contrasts. Reduce dumping or sloughing of excess earth and rock on downhill slopes.		
Vegetation Manipulation: Retain as much of the existing vegetation as possible.		
<b>Structures:</b> Minimize the number of structures and combine different activities in one structure. Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast. Use natural appearing forms to complement the characteristic landscape. Screen the structure from view by using natural land forms and vegetation.		
<b>Reclamation and Restoration:</b> Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Replace soil, brush, rocks, and natural debris over disturbed area.		
WASTE MANAGEMENT		
WASTE-1 In the event that contamination is identified during assessment of the project site, during any phase of GSEP construction, any additional work to assess and/or remediate any contamination shall be conducted under the oversight of DTSC, with CPM involvement.	The project owner shall consult with the Department of Toxic Substances Control, and abide by all federal, state and local requirements for site assessment and remediation if contaminated soil is identified during any phase of GSEP site construction. The project owner shall ensure that the CPM is involved and appraised of all discussions with Department of Toxic Substances Control, and CPM concurrence shall be required for project decisions addressing site remediation.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
WASTE MANAGEMENT (cont.)		
<b>WASTE-2</b> The project owner shall provide the resume of an experienced and qualified professional engineer or professional geologist, who shall be available for additional site characterization (if needed), building demolition, soil excavation, and grading activities, to the CPM for review and approval. The resume shall show experience in remedial investigation and feasibility studies.	At least 30 days prior to the start of site mobilization, the project owner shall submit the resume to the CPM for review and approval.	CEC/BLM
The professional engineer or professional geologist shall be given authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil and impact public health, safety and the environment.		
<b>WASTE-3</b> If potentially contaminated soil is identified during site characterization, demolition, excavation or grading at either the proposed site or linear facilities, as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the professional engineer or professional geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and provide a written report to the project owner, representatives of Department of Toxic Substances Control or Regional Water Quality Control Board, and the CPM stating the recommended course of action.	The project owner shall submit any reports filed by the professional engineer or professional geologist to the CPM within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.	CEC/BLM
Depending on the nature and extent of contamination, the professional engineer or professional geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If in the opinion of the professional engineer or professional geologist, significant remediation may be required, the project owner shall contact the CPM and representatives of the Department of Toxic Substances Control or Regional Water Quality Control Board for guidance and possible oversight.		
<b>WASTE-4</b> The project owner shall prepare a Construction Waste Management Plan for all wastes generated during construction of the facility and shall submit the plan to the CPM for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:	The project owner shall submit the Construction Waste Management Plan to the CPM for approval no less than 30 days prior to the initiation of construction	CEC/BLM
<ul> <li>A description of all construction waste streams, including projections of frequency, amounts generated, and hazard classifications; and</li> </ul>	activities at the site.	
<ul> <li>Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans.</li> </ul>		
<b>WASTE-5</b> The project owner shall prepare a UXO Identification, Training and Reporting Plan to properly train all site workers in the recognition, avoidance and reporting of military waste debris and ordnance. The project owner shall submit the plan to the CPM for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:	The project owner shall submit the UXO Identification, Training and Reporting Plan to the CPM for approval no less than 30 days prior to the initiation of	CEC/BLM
A description of the training program outline and materials, and the qualifications of the trainers; and	construction activities at the site.	
<ul> <li>Identification of available trained experts that will respond to notification of discovery of any ordnance (unexploded or not); and</li> </ul>		
<ul> <li>Work plan to recover and remove discovered ordnance, and complete additional field screening, possibly including geophysical surveys to investigate adjacent areas for surface, near surface or buried ordnance in all proposed land disturbance areas.</li> </ul>		

Condition of Certification	Verification	Responsible Agency
WASTE MANAGEMENT (cont.)		
WASTE-6 The project owner shall obtain a hazardous waste generator identification number from the United States Environmental Protection Agency (USEPA) prior to generating any hazardous waste during project construction and operations.	The project owner shall keep a copy of the identification number on file at the project site and provide documentation of the hazardous waste generation and notification and receipt of the number to the CPM in the next scheduled Monthly Compliance Report after receipt of the number. Submittal of the notification and issued number documentation to the CPM is only needed once unless there is a change in ownership, operation, waste generation, or waste characteristics that requires a new notification to USEPA. Documentation of any new or revised hazardous waste generation notifications or changes in identification number shall be provided to the CPM in the next scheduled compliance report.	CEC/BLM
<b>WASTE-7</b> Upon notification of any impending waste management-related enforcement action related to project site activities by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts for the project, and describe the owner's response to the impending action or if a violation has been found, how the violation will be corrected.	The project owner shall notify the CPM in writing within 10 days of receiving written notice from authorities of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the way project-related wastes are managed as a result of a finalized action against the project.	CEC/BLM
WASTE-8 DELETED		CEC/BLM
<ul> <li>WASTE-9 The project owner shall prepare an Operation Waste Management Plan for all wastes generated during operation of the Genesis Solar Energy facility and shall submit the plan to the CPM for review and approval. The plan shall contain, at a minimum, the following:</li> <li>A detailed description of all operation and maintenance waste streams, including projections of amounts to be generated, frequency of generation, and waste hazard classifications;</li> </ul>	The project owner shall submit the Operation Waste Management Plan to the CPM for approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.	CEC/BLM
<ul> <li>Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans;</li> </ul>	The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual	
<ul> <li>Information and summary records of conversations with the local Certified Unified Program Agency and the Department of Toxic Substances Control regarding any waste management requirements necessary for project activities. Copies of all required waste management permits, notices, and/or authorizations shall be included in the plan and updated as necessary;</li> </ul>	waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current	

Condition of Certification	Verification	Responsible Agency
WASTE MANAGEMENT (cont.)		
A detailed description of how facility wastes will be managed, and any contingency plans to be employed, in the event of an unplanned closure or planned temporary facility closure; and	waste generation and management practices.	
A detailed description of how facility wastes will be managed and disposed of upon closure of the facility.		
WASTE-10 The project owner shall document all releases and spills of HTF as described in Condition of Certification WASTE-11 and report only those that are 42 gallons or more, the CERCLA reportable quantity. Cleanup and temporary staging of HTF-contaminated soils shall be conducted in accordance with the approved Operation Waste Management Plan required in Condition of Certification of WASTE-9. The project owner shall sample HTF-contaminated soil from CERCLA reportable incidents involving 42 gallons or more in accordance with the United States Environmental Protection Agency's (USEPA) current version of "Test Methods for Evaluating Solid Waste" (SW-846). Samples shall be analyzed in accordance with USEPA Method 8015 or other method to be reviewed and approved by DTSC and the CPM.  The project owner shall notify the DTSC and CPM of spill results and whether the soil is considered hazardous or non-hazardous. HTF-contaminated soil that exceeds the hazardous waste levels must be disposed of in accordance with California Health and Safety Code (HSC) Section 25203. HTF-contaminated soil that does not exceed the hazardous waste levels may be discharged into the land treatment unit (LTU). For discharges into the LTU, the project owner shall comply with the Waste Discharge Requirements contained in the Soil & Water Resources section of this document.  If DTSC and the CPM concur with the project owner that the HTF-contaminated soil is considered hazardous it shall be disposed of in accordance with California Health and Safety Code (HSC) Section 25203 and procedures outlined in the approved Operation Waste Management Plan required in Condition of Certification WASTE-11.	Within 28 days of an HTF spill that is 42 gallons or more, the CERCLA reportable quantity, the project owner shall notify the DTSC and CPM of the spill and provide the results of the analyses and their assessment of whether the spill is hazardous or non-hazardous in accordance with the criteria established and approved by the DTSC and the CPM per WASTE-10.	CEC/BLM
If DTSC and the CPM concur with the project owner that the HTF-contaminated soil is considered non-hazardous it shall be retained in the LTU and treated on-site in accordance with the Waste Discharge Requirements contained within in the Soil & Water Resources section of this document.		
WASTE-11 The project owner shall ensure that spills or releases of hazardous substances, hazardous materials, or hazardous waste that are in excess of EPA's reportable quantities (RQ) that occur on the project property or related facilities during construction and on the property during operation, are documented and cleaned up and that wastes generated from the release/spill are properly managed and disposed of, in accordance with all applicable federal, state, and local requirements. The project owner shall document management of all accidental spills and unauthorized releases of hazardous substances, hazardous materials, and hazardous wastes that are in excess of EPA's reportable quantities (RQ), that occur on the project property or related linear facilities during construction and on the property during operation.	A copy of the unauthorized release/spill documentation shall be provided to the CPM within 30 days of the date the release was discovered. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; how release was managed and material cleaned up; amount of contaminated soil and/or cleanup wastes generated; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release.	CEC/BLM

Condition of Certification	Verification	Responsible Agency
WORKER SAFETY AND FIRE PROTECTION		
WORKER SAFETY-1 The project owner shall submit to the Compliance Project Manager (CPM) a copy of the Project Construction Safety and Health Program containing the following:	At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and	CEC/BLM
a Construction Personal Protective Equipment Program;	approval a copy of the Project Construction Safety and Health Program.	
a Construction Exposure Monitoring Program;	rioditi riogidii.	
a Construction Injury and Illness Prevention Program;		
<ul> <li>a Construction heat stress protection plan that implements and expands on existing Cal OSHA regulations as found in 8 CCR 3395;</li> </ul>		
a Construction Emergency Action Plan; and		
a Construction Fire Prevention Plan.		
The Personal Protective Equipment Program, the Exposure Monitoring Program, the Heat Stress Protection Plan, and the Injury and Illness Prevention Program shall be submitted to the CPM for review and approval concerning compliance of the program with all applicable safety orders. The Construction Emergency Action Plan and the Fire Prevention Plan shall be submitted to the Riverside County Fire Department for review and comment prior to submittal to the CPM for approval.		
<b>WORKER SAFETY-2</b> The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following:	At least 30 days prior to the start of first-fire or commissioning, the project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program.	CEC/BLM
an Operation Injury and Illness Prevention Plan;		
<ul> <li>an Operation heat stress protection plan that implements and expands on existing Cal OSHA regulations (8 CCR 3395);</li> </ul>		
a Best Management Practices (BMP) for the storage and application of herbicides;		
an Emergency Action Plan;		
Hazardous Materials Management Program;		
Fire Prevention Plan (8 Cal Code Regs. § 3221); and		
Personal Protective Equipment Program (8 Cal Code Regs, §§ 3401—3411).		
The Operation Injury and Illness Prevention Plan, Emergency Action Plan, Heat Stress Protection Plan, BMP for Herbicides, and Personal Protective Equipment Program shall be submitted to the CPM for review and comment concerning compliance of the programs with all applicable safety orders. The Fire Prevention Plan and the Emergency Action Plan shall also be submitted to the Riverside County Fire Department for review and comment.		

Condition of Certification	Verification	Responsible Agency
WORKER SAFETY AND FIRE PROTECTION (cont.)		
WORKER SAFETY-3 The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant construction activities and relevant laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:  • have overall authority for coordination and implementation of all occupational safety and health practices, policies, and	At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the Construction Safety Supervisor (CSS). The contact information of any replacement CSS shall be submitted to the CPM within one business day.	CEC/BLM
<ul> <li>assure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;</li> </ul>	The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:	
<ul> <li>assure that all construction and commissioning workers and supervisors receive adequate safety training;</li> <li>complete accident and safety-related incident investigations and emergency response reports for injuries and inform</li> </ul>	<ul> <li>record of all employees trained for that month (all records shall be kept on site for the duration of the project);</li> </ul>	
<ul> <li>the CPM of safety-related incidents; and</li> <li>assure that all the plans identified in Conditions of Certification WORKER SAFETY-1 and -2 are implemented.</li> </ul>	lated incidents; and  • summary report of safety management actions	
	<ul> <li>report of any continuing or unresolved situations and incidents that may pose danger to life or health; and</li> </ul>	
	report of accidents and injuries that occurred during the month.	
WORKER SAFETY-4 The project owner shall make payments to the Chief Building Official (CBO) for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. Those services shall be in addition to other work performed by the CBO. The Safety Monitor shall be selected by and report directly to the CBO and will be responsible for verifying that the Construction Safety Supervisor, as required in Condition of Certification Worker Safety-3, implements all appropriate Cal/OSHA and Energy Commission safety requirements. The Safety Monitor shall conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill those responsibilities.	At least sixty (60) days prior to the start of construction, the project owner shall provide proof of its agreement to fund the Safety Monitor services to the CPM for review and approval.	CEC/BLM
WORKER SAFETY-5 The project owner shall ensure that a portable automatic external defibrillator (AED) is located on site during construction and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functioning at all times. During construction and commissioning, the following persons shall be trained in its use and shall be on site whenever the workers that they supervise are on site: the Construction Project Manager or delegate, the Construction Safety Supervisor or delegate, and all shift foremen. During operations, all power plant employees shall be trained in its use. The training program shall be submitted to the CPM for review and approval.	At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM proof that a portable automatic external defibrillator (AED) exists on site and a copy of the training and maintenance program for review and approval.	CEC/BLM

Cor	ndition of Certification	Verification	Responsible Agency
wo	RKER SAFETY AND FIRE PROTECTION (cont.)		
wo a. b.	RKER SAFETY-6 The project owner shall:  Identify and provide a second access gate for emergency personnel to enter the site. This secondary access gate shall be at least one-quarter mile from the main gate and shall be accessed via a gravel road off the main road near the facility fence line. The location shall be submitted to the Riverside County Fire Department (RCFD) for review and comment and to the CPM for review and approval.  Provide two all-terrain fire engines, as identified and chosen by the RCFD, for emergency personnel to enter the site in the event the access to the plant is unavailable. The applicant will be required to provide funding for replacement of similar equipment based on the 20 year depreciation methodology used by the Riverside County Fire Department throughout the life of the project.  If at some point in the future an alternate means of emergency access to the project site, other than the all-terrain fire engines, is available, reviewed by the RCFD, and approved by the CPM, the need for the project owner to provide the all-terrain fire engines or funding for equipment maintenance or replacement would no longer be required.	At least 60 days prior to the start of site mobilization, the project owner shall submit to the Riverside County Fire Department and the CPM preliminary plans showing the location of a second access gate to the site, a description of how the gate will be opened by the fire department, and a description and map showing the location and composition of the gravel road that will provide access from the main access road to the second access gate. At least thirty (30) days prior to the start of site mobilization, the project owner shall submit final plans to the CPM for review and approval. The final plan submittal shall also include a letter containing comments from the Riverside County Fire Department or a statement that	CEC/BLM
		no comments were received.  At least 180 days prior to the initial receipt of heat transfer fluid on-site, the project owner shall:  a. Submit proof to the CPM in the form of a signed statement from the Chief of the RCFD that the all-terrain fire engines have been delivered to the RCFD and are acceptable to the RCFD.	
		b. If an alternative means of emergency access to the site is provided prior or subsequent to the purchase of the all-terrain fire engines, the project owner shall submit to the RCFD for review and comment and to the CPM for review and approval plans describing the specifications for the alternative means of emergency access. The project owner shall also provide to the CPM documentation demonstrating that the RCFD approves the alternate means.	
(1) r	RKER SAFETY-7 The project owner shall either: reach an agreement with the Riverside County Fire Department regarding funding of its project-related share of capital to build fire protection/response infrastructure and provide appropriate equipment as mitigation of project-related acts on fire protection services, or, if no agreement can be reached shall	At least 30 days prior to the start of site mobilization, the project owner shall provide to the CPM for review and approval either:  (1) A copy of the agreement with the RCFD or	CEC/BLM
(2) f RCI	fund its share of the capital costs in the amount of \$850,000 and shall provide an annual payment of \$375,000 to the FD for the support of three fire department staff commencing with the date of site mobilization and continuing annually reafter on the anniversary until the final date of power plant decommissioning.	(2) Documentation that a letter of credit in the amount of \$850,000 has been provided to the RCFD and that a letter of credit in the amount of \$375,000 will be	

Con	dition of Certification	Verification	Responsible Agency
wo	RKER SAFETY AND FIRE PROTECTION (cont.)		
		provided each year at the start of commercial operations.	
WORKER SAFETY-8 The project owner shall develop and implement an enhanced Dust Control Plan that includes the requirements described in AQ-SC3 and additionally requires:		At least sixty (60) days prior to the commencement of site mobilization, the enhanced Dust control Plan shall	CEC/BLM
i.	site worker use of dust masks (NIOSH N-95 or better) whenever visible dust is present;	be provided to the CPM for review and approval.	
ii.	implementation of methods consistent with Rule 402 of the Kern County Air Pollution Control District (as amended Nov. 3, 2004); and		
iii.	implementation of enhanced dust control methods (increased frequency of watering, use of dust suppression chemicals, etc. consistent with <b>AQ-SC4</b> ) immediately whenever visible dust comes from or onto the site or when PM10 measurements exceed 50 $\mu g/m^3$ .		
Dep plan	RKER SAFETY-9 The project owner shall participate in joint training exercises with the Riverside County Fire artment (RCFD). The project owner shall coordinate this training with other Energy Commission-licensed solar power ts within Riverside County such that this project shall host the annual training on a rotating yearly basis with the other r power plants.	At least ten (10) days prior to the start of commissioning, the project owner shall submit to the CPM proof that a joint training program with the RCFD is established. In the annual compliance report to the CPM, the project owner shall include the date, list of participants, training protocol, and location of the joint training.	CEC/BLM